Annual medical report / Colony and Protectorate of Kenya.

COLONY AND PROTECTORATE OF KENYA

MEDICAL DEPARTMENT ANNUAL REPORT 1937

INCLUDING THE

MEDICAL RESEARCH LABORATORY ANNUAL REPORT 1937

PRICE 5/-

1938

PRINTED AND PUBLISHED BY THE GOVERNMENT PRINTER
NAIROBI, KENYA COLONY

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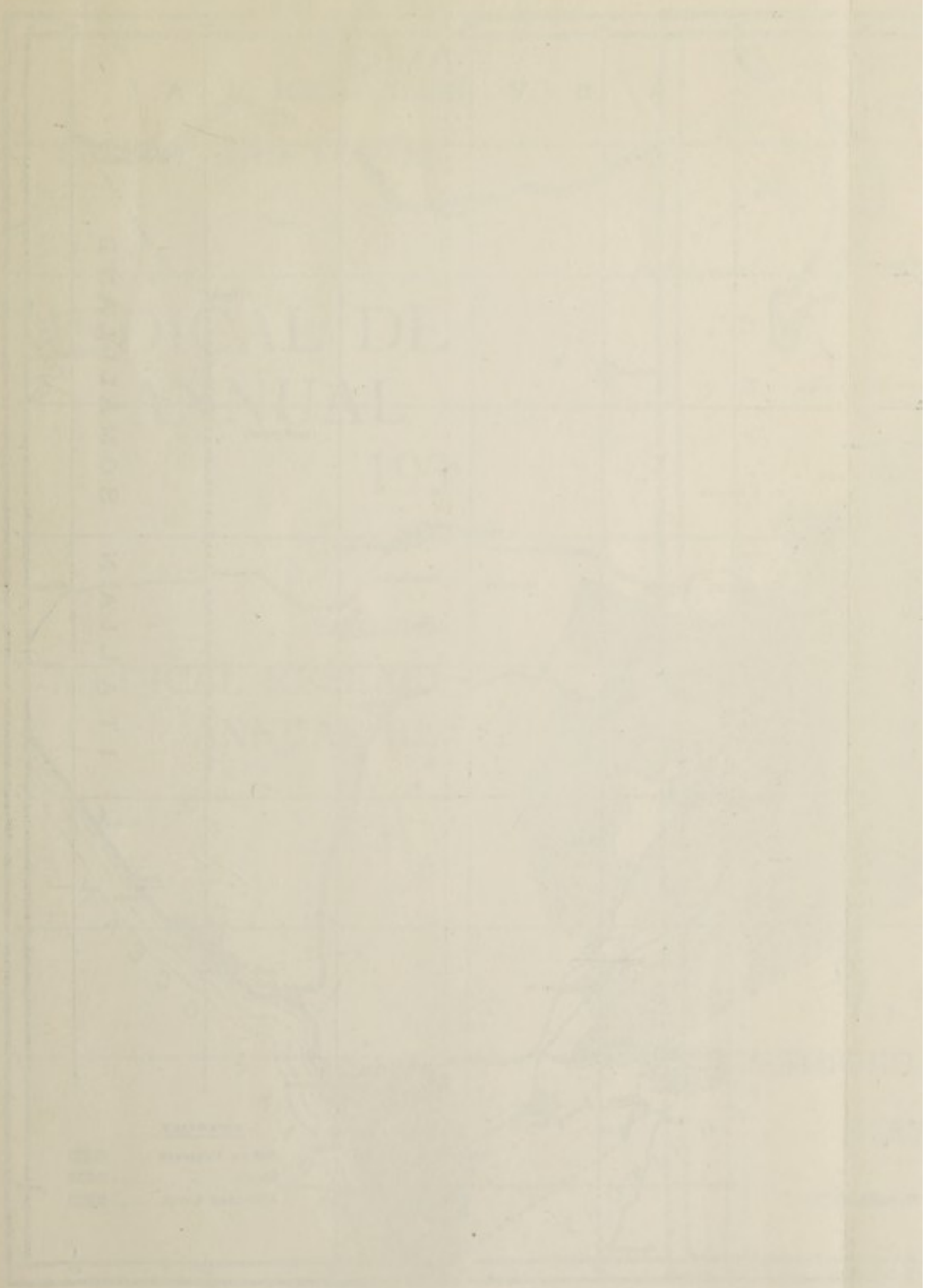

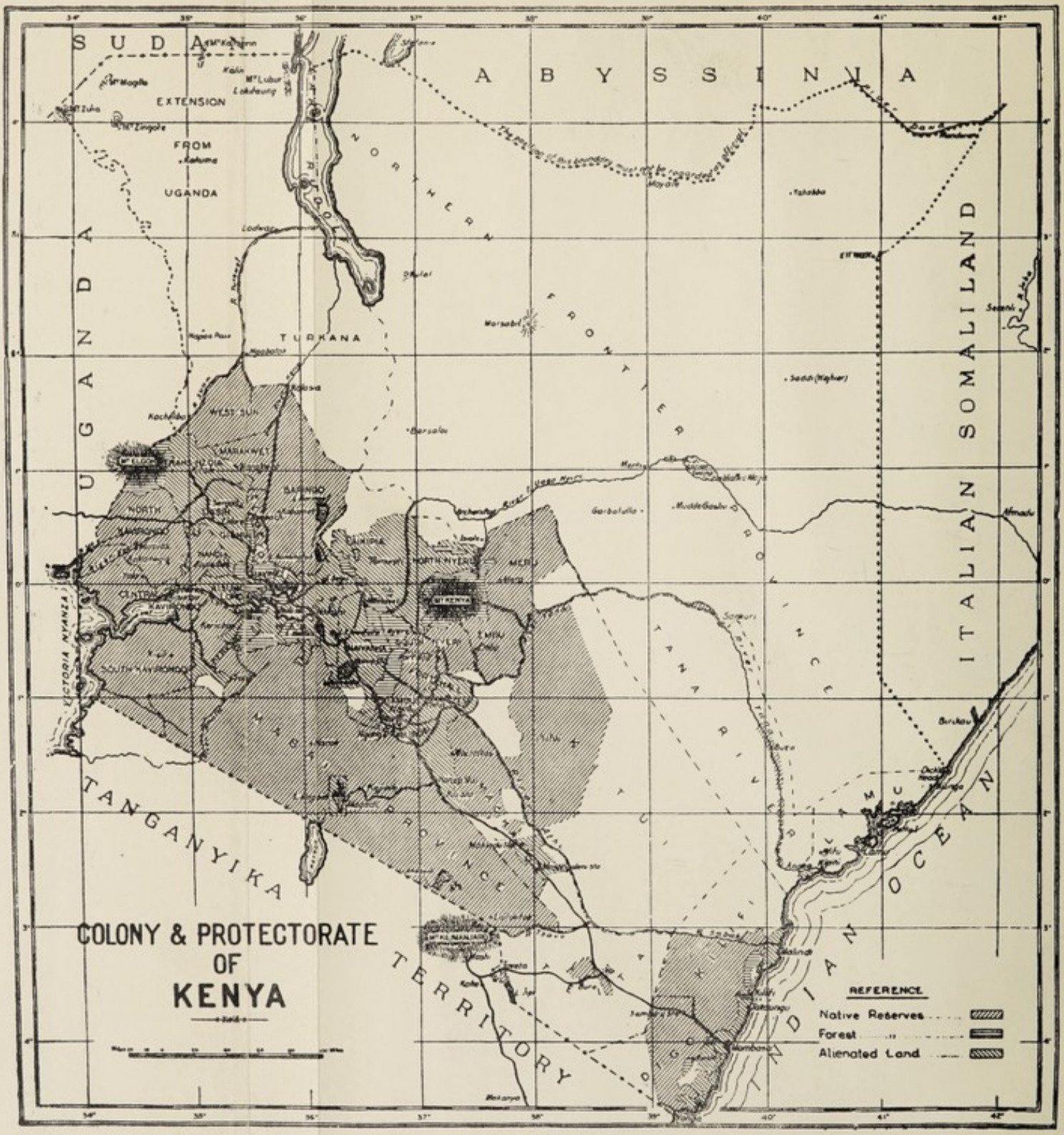
SUDAN
ABYSSINIA
EXTENSION
FROM
UGANDA
UGANDA
TURKANA
NORTHERN FRONTIER PROVINCE
ITALIAN SOMALILAND
WEST SUK
MARAKWET
SAMBURU
NORTH NYERI
MERU
KITUI
KIKUYU
KAMBA
SOUTH KAVIRONDO
VICTORIA NYANZA
TANA RIVER PROVINCE
COAST PROVINCE
TANGANYIKA TERRITORY
INDIAN OCEAN
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ANNUAL REPORT OF THE MEDICAL RESEARCH LABORATORY FOR 1937

ERRATA

MEDICAL DEPARTMENT ANNUAL REPORT, 1937

Page 18 .. Helminthic Diseases, 1936 total: *for* 51,029 *read* 52,029.

Page 29 .. Anaesthetics, line 3: *for* Thought *read* Though.

Page 41 .. Paragraph commencing "Famine Dropsy": *for* wounderful *read* wonderful.

MEDICAL RESEARCH ANNUAL REPORT

Page 3 .. Second table, Asians: *for* 606 *read* 607.

Page 8 .. Re-Vaccinations, "Successful" column—against Wesu: *delete* figure 5.

Total of "Failed" column: *for* 563 *read* 583.

Page 12 .. Paragraph 6, Research: *for* meningities *read* meningitis.

Page 13 .. First table—"European" column: *for* 22 *read* 12.

Page 14 .. After first sentence: *insert* (*a*) *Urine*—.

Under sub-section (*d*): *for* Fractional tests *read* Fractional test meals.

Page 16 .. Section 6, sub-paragraph (*b*), last sentence: *for* Local Native Council *read* Administration.

MEDICAL DEPARTMENT ANNUAL REPORT
1937

INTRODUCTORY

Whilst no outstanding events affecting the health of the Colony occurred during 1937, it is gratifying to be able to report that despite the many difficulties encountered, considerable progress can be recorded, although, owing to the financial situation, no appreciable extension of Medical Services was possible.

During the year, no serious outbreak of infectious disease occurred and the general health of the people was, on the whole, satisfactory.

Although the Medical staff was increased by two, casualties and emergencies reduced the effective strength to a level no higher than that of the previous year, and it is, therefore, satisfying to note that a record number of patients received medical treatment at the hospitals and dispensaries and that there was a considerable extension of activities in connexion with the improvement of environmental conditions in the native reserves.

The natives' faith in European medicine, which is now thoroughly established throughout the Colony, shows no signs of diminishing and the increasing number of Africans who seek admission to hospital is throwing a severe strain on the accommodation available. Most hospitals are overcrowded to a degree which causes considerable anxiety and the solution of the overcrowding problem, with the limited resources available, is not easy.

Considerable progress in connexion with the preparation of the plans for the new Group Hospital in Nairobi can be recorded. The advanced state of the plans, on which much care and work has been expended, should enable building operations to be commenced in 1938. The completion of this hospital will result in a marked improvement in hospital facilities in Nairobi for all sections of the community and what is equally important, will provide more adequate facilities for the systematic training of Africans, without which no marked extension of medical activities in the Colony as a whole can be brought about. Despite the inadequacy of the present facilities, the training of Africans in different branches of medicine has been continued although, unfortunately, it has not yet been possible to make the necessary provision for the further training of African women. Considerable reliance can now be placed on many trained Africans who, in addition to rendering good service in general medicine, have also proved their worth as Laboratory workers, theatre assistants, anaesthetists and sanitary assistants. The general standard of work is good and applicants for training are increasing.

Public health activities in the native reserves have been maintained and extended to some extent. For the last five years, most native reserves have had, at least, the nucleus of the staff which was outlined in the Health Scheme of 1927, and the opportunity has been afforded of observing the working of the scheme in a limited form. The results have exceeded all expectations and in regard to domestic and general hygiene, the exprimental stage is rapidly giving way to a settled and progressive policy. Though naturally dependant on economic conditions, the outlook of the native, particularly in those reserves contiguous to the settled areas, has entirely changed. Insanitary conditions are gradually disappearing and a higher standard of living in general is rapidly being introduced. This has largely been achieved by the better economic conditions which now prevail, and by the strenuous efforts in propaganda and practical teaching of the Sanitary Inspectorate staff, to whom the native is now accustomed to look for help in all matters concerned with housing, water supplies, general hygiene, etc. Particularly good results have been obtained with regard to housing, and the cleaner village campaigns in many districts have done much to reduce the incidence of plague and other infectious diseases.

Maternity and Child Welfare work deserves special mention, for in no other branch of the Department's activities has there been greater comparative progress. It is of further deep significance as an indication of the social progress of the native; for whereas only a few years ago women could only with difficulty be persuaded to enter hospitals and centres for ante-natal and maternal care, the difficulty now is to find accommodation for them.

The actual work is the concern not only of Government and the Local Authorities, both European and African, but also of the Lady Grigg Welfare League which is, in addition, undertaking the training of Asian and African women as midwives with the object of providing increased maternity facilities for these sections of the community.

Marked progress can be recorded in connexion with the anti-malarial scheme at Kisumu, the money for which was obtained from the Colonial Development Fund, and it is hoped that this work will be completed at a comparatively early date. In the vicinity of the airport the work has included swamp reclamation and filling, a short diversion of a river flowing into the lake and the complete removal of a native village with the provision of alternative accommodation. Extensive tree planting is also being undertaken. In addition to providing more effective control of malaria, the aedes index has been reduced to a marked degree, a matter of importance owing to the position of Kisumu as a cross roads for Empire and local aircraft.

The part played by local bodies as Public Health Authorities is becoming increasingly greater. In general, the duties of these authorities have been efficiently discharged. In the native reserves the Local Native Councils are playing an important part in public health and are now capable of creating considerable power for progress.

A sudden incursion of some seven thousand Abyssinian refugees into Kenya in June and July of 1937 presented a medical problem of some magnitude. Their evacuation from the frontier over some three hundred miles of extremely difficult country to the camp which had been prepared for them at Isiolo was accomplished successfully with remarkably few casualties, and reflects great credit on all concerned. The incursion will be referred to more fully in a later section of this report.

In concluding these introductory remarks, I should like to record my appreciation of the loyal support which I have received from all members of the staff, many of whom have had to carry out their work under considerable difficulties.

I—ADMINISTRATION

The Medical Department of the Colony is faced with the problem of arranging for the provision of medical services for some 18,000 Europeans, about 45,000 Asians and approximately 3,000,000 Africans. During the year 1937 the resources available did not permit of any appreciable extension of medical services but services which have already been established were maintained and some progress has been made on the lines indicated in the Report for 1936.

The position as regards medical services for Europeans can, on the whole, be described as satisfactory. Medical Practitioners are now established in a number of areas and they, together with the Government Medical Officers stationed throughout the Colony, provide a reasonably adequate medical service in most districts and the service is gradually being extended. In addition to the Government European Hospitals at Nairobi, Mombasa and Kisumu, non-Government Hospitals and Nursing Homes have now been provided at a number of centres. When the Group Hospital has been completed at Nairobi and facilities improved at Mombasa, the hospital position should be very satisfactory.

Although medical services for Europeans are provided on a reasonably adequate scale, the cost of hospital treatment is a matter which causes considerable anxiety to the person of average or small means. When a patient

is unable to afford the full hospital fees, a reduction or remission is made in all cases by Government, but many people dislike accepting charity in this form and the possibility of inaugurating some form of hospital insurance scheme is at present being considered.

The hospital position as regards the Asian community cannot be described as satisfactory but modern hospital wards for Asians are included in the new Group Hospital Scheme, which will improve the position in Nairobi. Arrangements have already been made to improve the Asian hospital facilities at Mombasa. More modern accommodation is, however, still required in this town, and on a minor scale at a number of other centres.

Medical Services for Africans

In the towns and settled areas, medical services for Africans are rapidly becoming quite inadequate, in spite of the fact that there has been some expansion of these services during the past few years. Existing hospitals are becoming overcrowded to a degree which gives rise to considerable anxiety, and additional hospitals are urgently required at several centres.

Large agricultural and industrial concerns may make their own arrangements, as has been done in some instances. There are, however, few concerns large enough or sufficiently experienced to provide their own hospital facilities and as Local Authorities have had little, if any, experience of such schemes and would probably find difficulty in financing them, it would appear that only the State can undertake this work for the present. The general financial position makes the solution of this problem difficult, but the solution probably lies along the lines suggested in Chapter VII of the Report of the Local Government Commission, 1927.

In the native reserves the administrative policy of the Department, which was described fully in the Annual Report for 1936, was continued, and despite the general shortage of staff and the limited resources available, steady progress can be recorded. During the year no new hospitals were opened but some additional accommodation was provided at existing hospitals, the funds for the purpose being provided almost entirely from Local Native Council sources.

In 1937 the system of departmental administration, brought into operation in 1933, remained unchanged and local authorities did not assume any further responsibilities in regard to Public Health Administration, although some discussion took place with the Mombasa Municipal Board in connexion with this matter. The introduction of the system whereby the medical and sanitation divisions of the Department were merged and the re-allocation of staff consequent upon the assumption of local government powers in some of the larger towns has undoubtedly led to greater efficiency. The maintenance of that efficiency is, however, becoming increasingly difficult on account of various factors of which the increasing amount of medical relief provided, as shown in the following table, is but a partial indication.

Year	Sanctioned Estimates	Actual Expenditure	Qualified Medical Staff	European		Asiatic and African		Out-dispensary attendances
				In-patients	Out-patients	In-patients	Out-patients	
	£	£						
1932	219,357	197,260	54	2,375	1,595	31,382	261,795	646,033
1933	215,116	199,568	55	2,182	1,327	36,443	300,277	774,302
1934	201,286	197,967	52	2,271	1,264	42,938	331,979	851,370
1935	199,817	203,451	50	1,831	3,228	43,422	353,346	989,796
1936	195,562	196,368	48	1,817	3,609	46,632	408,788	976,877
1937	207,353	209,839	50	1,788	2,765	50,915	466,469	1,038,310

A further factor, and one of great importance, is the fuller appreciation shown by the native of the medical and health facilities which have now been provided in most reserves. This, in turn, has led to a demand on the part of the native for medical relief and and instruction and assistance in every

branch of public health work, with which the present personnel of the Medical Department cannot properly cope. There is, thus, the danger of a state of affairs being brought about in which the increasing desire of the native population for improvement in its general welfare is unable to be met. In view of this desire, any curtailment of the work done by the Department would be disastrous.

It remains to be noted that in endeavouring to accomplish the volume of work which demands attention, the medical and nursing staff are being subjected to considerable strain. During the year, owing to excessive casualties, personnel was reduced to a level which placed a heavy burden on the effective staff. The situation was rendered more acute by the sudden emergency which arose as the result of the movement of a large number of Abyssinian refugees into the Colony. In addition, two medical officers were supplied for full-time duties to posts which were previously held by part-time District Surgeons, at Nakuru and Eldoret, the centres of important settled areas.

In putting forward suggestions to remedy the situation which has arisen, it would appear that the ultimate solution lies in a greater extension to the native himself of financial and practical responsibility, through such institutions as Local Native Councils, which annually are becoming more important and which are taking an increasing interest in the general welfare of the people they represent.

The immediate need is an extension of medical staff, including reliefs to meet the internal requirements of the Department and emergency conditions. The pressure of medical work alone on the staff is, at present, such that instructional and supervisory duties must suffer to the detriment of the ultimate object in view.

The staff which was retained to administer the public health and medical services provided by Government and its organization and disposition, are set out below, together with a descriptive list of the institutions which were maintained:—

Administrative Division

Director of Medical Services.
Deputy Director of Medical Services.
Senior Medical Officer.
Accountant.
Medical Storekeeper.
Clerical Staff, etc.

Medical Division

2 Senior Medical Officers.
1 Specialist, Surgical.
1 Specialist, Ophthalmic.
40 Medical Officers.
3 District Surgeons.
1 Resident Physician, Mental Hospital.
2 Assistant Surgeons.
4 Dispensers and Wardmasters.
1 Chief Instructor.
1 Matron (European Hospital, Nairobi).
1 Housekeeper (European Hospital, Nairobi).
52 Nursing Sisters.
1 Superintendent, Mental Hospital.
1 Matron, Mental Hospital.
1 Assistant Matron, Mental Hospital.
2 Male Mental Nurses.
2 Assistant Surgeons (Asian).
24 Sub-Assistant Surgeons (Asian).
2 Nursing Sisters (Asian).
African staff of Compounders, Hospital Assistants, Dressers (Male and Female), etc.

Sanitation Division

1 Chief Sanitary Inspector.
2 Senior Sanitary Inspectors.
9 Sanitary Inspectors.
2 Sanitary Overseers.
1 Superintendent, Infectious Diseases Hospital.

Note.—The Sanitation Division is not effective as a division of the department. The Senior Sanitary Inspectors and Inspectors are posted to out-stations where they are on the staff of the Medical Officer of Health of the station. The Chief Sanitary Inspector is posted to Headquarters, where he is on the staff of the Director, and communicates with the remainder of the members of the division only for the Director and through the Medical Officer of Health concerned.

Laboratory Division

Deputy Director of Laboratory Services (post vacant).
1 Senior Pathologist.
2 Pathologists.
1 Biochemist.
2 Entomologists.
1 Laboratory Superintendent.
10 Laboratory Assistants.
2 Laboratory Assistants (Learner Grade).
2 Laboratory Assistants (Asians).
African staff, Laboratory Assistants, Attendants, etc.

The composition of the staff may be summarized as follows:—

European.

Medical Officers	48
Sanitary Inspectors	12
Laboratory Assistants, etc.	13
Nursing Sisters, etc.	57
Hospital Superintendents, Wardmasters, etc.	13
Clerks, etc.	10
Total ...	153

Asian.

Assistant Surgeons	2
Sub-Assistant Surgeons	24
Compounders	5
Nursing Sisters	2
Clerks	15
Total ...	48

African.

Hospital Assistants (systematically trained male nurses)	41
Compounders (systematically trained) ...	14
Health Workers (systematically trained ...	25
Laboratory Assistants (many highly trained)	92
Dressers (including about 130 women) ...	832
Ambulance drivers	12
Cooks	36
Office boys, garden boys, sweepers, etc. ...	342
Total ...	1,394

DISTRIBUTION OF STAFF

TABLE I.—AT MEDICAL HEADQUARTERS AND IN THE CAPITAL TOWN OF NAIROBI

	At Medical Headquarters and District Health Offices	Medical Stores.	Mathari Mental Hospital	European Hospital, Nairobi	Native Hospital, Nairobi, Prison, General Dispensary, and I.D.H., Railway Dispensary and Training Depot	Medical Research Laboratory
Director of Medical Services	1	..	..	..	..	..
Deputy Director of M. Services	1	..	..	..	..	..
Senior Medical Officer ..	1	..	..	..	..	..
Accountant	1	..	..	..	..	..
Medical Storekeeper	..	1	..	..	..	..
Clerks (European)	4	2*	..	1	..	1
Surgical Specialist	..	..	..	..	1	..
†Medical Officers	..	..	..	1	4	..
Resident Physician, M.M.H...	..	..	1	..	..	..
Assistant Surgeons (European)	..	..	..	..	1	..
Wardmaster and Dispensers ..	..	..	..	..	3	..
Matron, European Hospital ..	..	..	..	1	..	..
Nursing Sisters	..	..	..	9	6	..
Housekeeper	..	..	..	1	..	..
Supt., Mathari Mental Hospital	..	..	1	..	..	..
Matron. Mathari Mental Hospital	..	..	1	..	..	..
Asst., Matron, Mental Hospital	..	..	1	..	..	..
Malé Mental Nurses	..	..	2	..	..	..
Female Mental Nurses ..	..	..	1	..	..	..
Chief Sanitary Inspector ..	1	..	..	..	..	..
Superintendent of I.D.H. ..	..	..	..	..	1	..
Senior Pathologist	..	..	..	..	..	1
Assistant Pathologists ..	..	..	..	..	..	2
Biochemist	..	..	..	..	..	1
Entomologists	..	..	..	..	..	2
Laboratory Superindent ..	..	..	..	..	..	1
Lab. Assistants (European) ..	..	..	..	..	..	8
Assistant Surgeon (Asiatic) ..	..	..	..	..	1	..
Sub-Asst. Surgeons (Asiatic)..	..	..	..	..	3	..
Laboratory Assistants (Asiatic)	..	..	..	..	..	2
Issuers	..	2	..	..	..	..
Compounders (Asiatic) ..	..	..	..	..	3	..
Clerks (Asian)	3	1	..	..	1	1
Hospital Assistants	..	..	..	..	15	..
Hospital Compounders (African)	..	..	..	..	?	..
Clerks (African)	1	..	1	..	4	..
African Laboratory Assistants	..	..	..	..	1	21
Other African Staff (excluding Learners)	4	15	63	28	112	22
Asian Nursing Sisters.. ..	..	..	..	..	2	..

*1 part time.

†1 M.O. promoted to the post of Ophthalmic Specialist with effect from 22-6-37.

TABLE II.—IN THE LARGER TOWNS

	Mombasa	Kisumu	Nakuru	Eldoret	Kitale
Senior Medical Officers	1	1	..	..	..
Medical Officers	3	2	..	..	..
District Surgeons	..	..	1	1	..
Assistant Surgeon (European)	1	..	..	..	..
Wardmasters	1	..	..	..	..
Nursing Sisters	7	5	1	2	1
Senior Sanitary Inspectors	..	1	1	..	..
Sanitary Inspectors	..	..	..	..	1
Laboratory Assistants (European) ..	1	1	..	..	..
Assistant Surgeons (Asiatic)	..	..	..	..	1
Sub-Assistant Surgeons (Asiatic) ..	3	1	1	2	..
Compounders (Asiatic)	1	1	..	..	..
Clerks (Asiatic)	2	1	1	..	..
Clerks (African)	1	1	1	1	1
Hospital Assistants	2	3	1	1	1
Hospital Compounders (African) ..	1	..	1	..	..
African Laboratory Assistants	4	7	..	1	..
Other African Staff	89	93	34	21	21
Nursing Sisters, Asian	2	..	..	..	..

DISTRIBUTION OF STAFF

TABLE III.—IN THE NATIVE RESERVES, THE TURKANA DISTRICT AND NORTHERN FRONTIER DISTRICT – 1937

	Kiambu	Fort Hall	Nyeri	Kerugoya	Meru	Machakos	Kitui	Kilifi	Malindi	Digo	Wesu	Kapsabet	Kabarnet	Tambach	Rumuruti	Maseno	Kakamega	Kisii	Kericho	Narok	Muriranjas	Kapenguria	Lodwar	Lokitaung	Lamu	Wajir	Moyale	Internment Camp, Isiolo	Kajiado	Ngong
Medical Officers	1	1	—	1	1	2	1	1	—	1	1	—	—	—	—	1	2	2	1	—	—	—	1	—	—	1	—	—	—	—
Nursing Sisters	*2	*1	—	2	—	2	—	—	—	1	1	—	—	—	—	—	2	1	1	—	—	—	—	—	—	—	—	—	—	—
Sanitary Inspectors	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—
European Laboratory Assistant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Sanitary Overseers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
S.A.S. (Asiatic)	—	1	1	—	1	—	1	—	1	—	—	1	1	1	—	—	—	—	—	1	—	1	—	1	1	—	1	1	—	—
Compounders (Asiatic) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Clerks (Asiatic)	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
Hospital Assistants	2	2	1	2	1	2	1	1	—	2	1	1	—	1	1	—	3	1	1	—	1	—	—	—	—	—	—	2	—	—
Compounders (African) ..	1	—	—	1	1	1	—	1	—	1	1	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—
African Laboratory Assistants	1	2	—	1	3	1	—	1	1	1	1	—	—	—	—	—	1	3	1	—	—	—	—	—	—	—	—	—	—	—
Clerks (African)	1	—	—	1	1	—	1	1	—	—	1	—	—	—	—	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—
Health Workers	2	2	—	3	—	3	1	2	—	2	1	—	—	—	—	3	3	1	1	—	1	—	8	—	1	4	—	7	2	1
Other African Staff	35	28	15	37	33	54	22	20	13	39	30	16	12	5	4	30	71	56	19	10	6	5			19					

*Part of year only

Institutions Maintained

Medical Research Laboratory, Nairobi.
Medical Stores, Nairobi.
Medical Training Depot, Nairobi.

Health Offices and Hospitals in the Larger Towns.

	Beds	
Nairobi—		
Native Hospital	256	(Asian 20)
European Hospital	31	
Mental Hospital (European, Asian, African)	265	(European 13) (Asian 17) (African 235)
Infectious Diseases Hospital (European, Asian, African)	149	(European 6)
General Dispensary	—	
Railway Dispensary	—	
Prison Hospital	70	
Police Depot Dispensary	—	
Mombasa—		
European Hospital	11	
Native Hospital	96	(Asian 9)
Infectious Diseases Hospital	69	(European 6)
Prison Hospital	23	
Child Welfare Centres	—	
Kisumu—		
European Hospital	10	
Native Hospital	165	(Asian 6)
Prison Hospital	9	
Nakuru—		
Native Hospital	73	
Eldoret—		
Native Hospital	52	(Asian 6)
Railway Dispensary	—	
Kitale—		
Native Hospital	30	

In the Native Reserves.

26 Hospitals with a total of 881 beds.
134 Out-dispensaries.

Summary of Hospital Accommodation

For Europeans	77 beds.
For Asians	58 beds.
For Africans	2,055 beds.

STAFF CHANGES DURING THE YEAR

The following are the principal appointments, promotions and changes made during the year:—

Dr. R. J. Harley-Mason, to be Ophthalmic Specialist with effect from the 22nd June, 1937.

Dr. G. F. Cobb, to be Resident Physician, Mathari Mental Hospital, with effect from the 29th May, 1937.

Resignations—

Nursing Sisters 6

Retirements—

Lady Medical Officer 1

Invalidings—

Senior Medical Officer 1

Appointments Terminated—

Wardmaster 1
Sub-Assistant Surgeons 4
District Surgeons 2
Visiting Physician, Mathari Mental Hospital 1
Nursing Sister 1

Transfers—

Sub-Assistant Surgeon, to Tanganyika Territory 1

Legislation

Apart from an amendment of the Medical Practitioners' and Dentists' Ordinance, defining the practise of dentistry, no ordinances primarily affecting the public health were enacted during the year.

Financial

The total of the sanctioned estimates for the Medical Department for the year 1937 was £210,448, an increase of £13,386 on the previous year, and the actual expenditure during the year amounted to £213,758.

The comparative table of the sanctioned estimates and expenditure of the Medical Department for the past three years is as follows:—

Year	Sanctioned Estimates	Sanctioned Extraordinary Estimates	Total Sanctioned	Actual Recurrent Expenditure	Actual Extraordinary Expenditure
	£	£	£	£	£
1935 ..	199,817	750	200,567	203,451	1,250
1936 ..	195,562	1,500	197,062	196,368	682
1937 ..	207,353	3,095	210,448	209,839	3,919

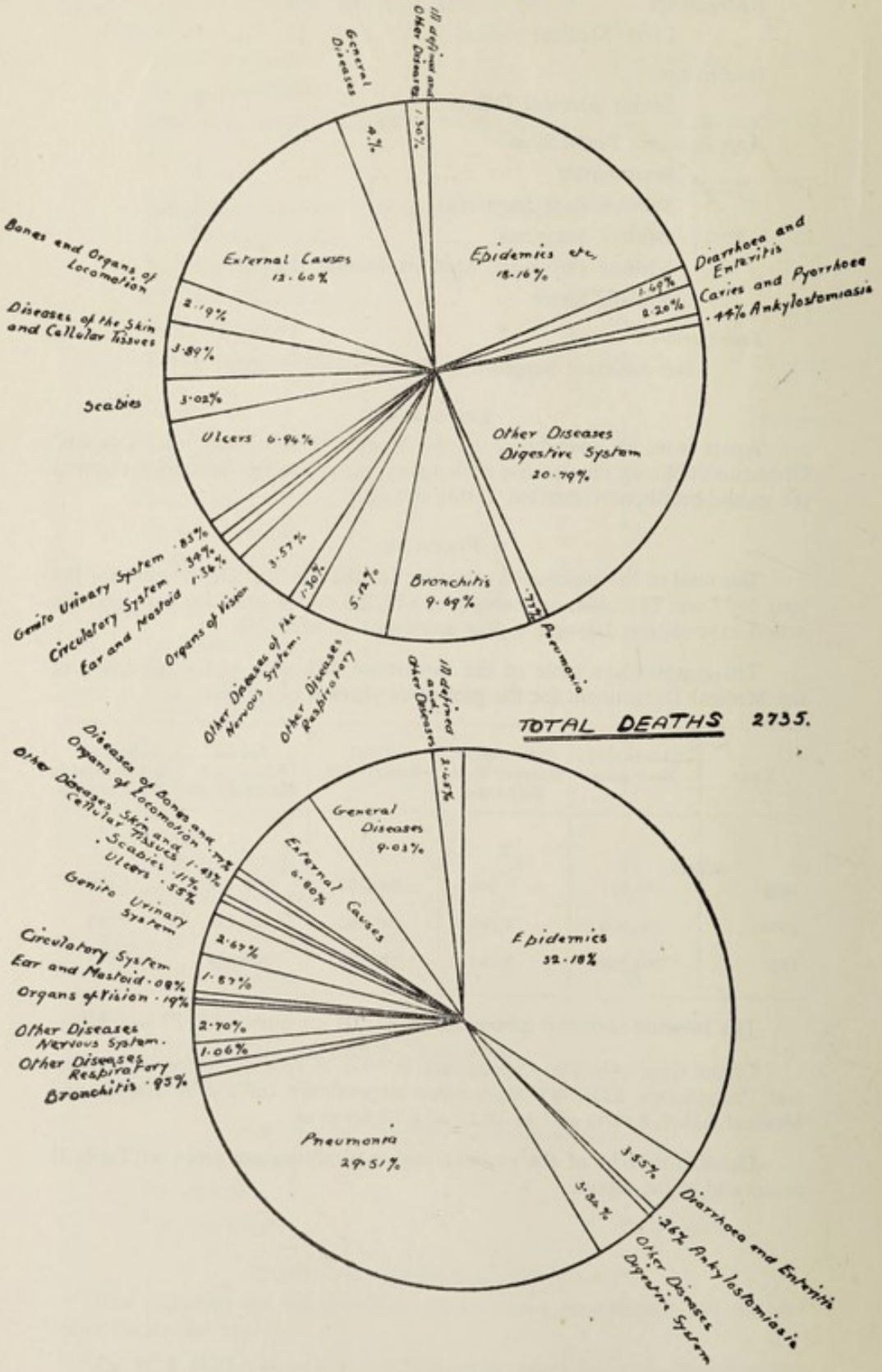
The revenue collected amounted to £23,013 against £23,392 in 1936.

Of the total estimated expenditure in 1937 of £3,437,298 for the Colony and Protectorate £210,448 represented expenditure on Public Health and Medical Relief, a ratio of 1 to 16.33 or 6.12 per cent.

Detailed returns of the revenue and expenditure are given in Table II at the end of the report.

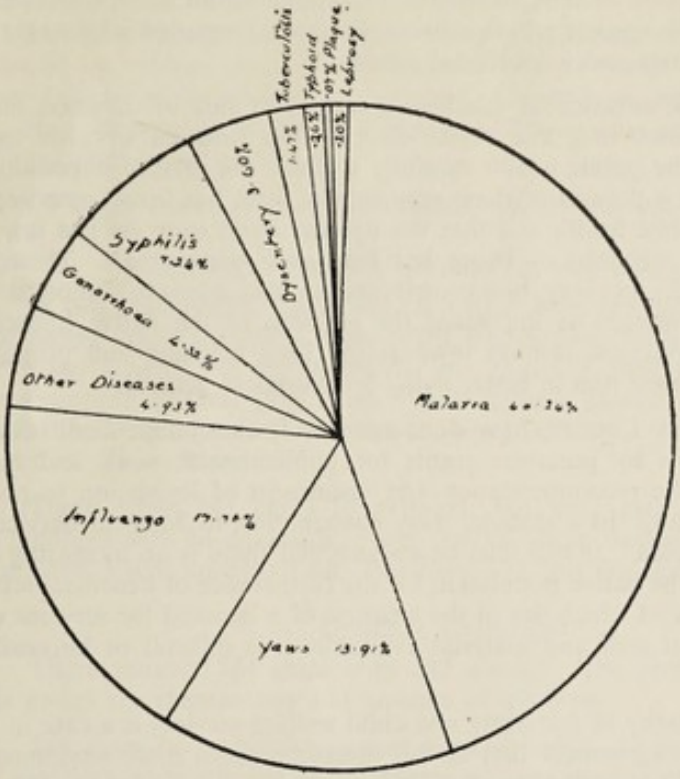
Proportion of Epidemic, Endemic, Infectious, Systemic and other Diseases shown as Percentages of Total Cases Treated at Hospitals and Dispensaries

TOTAL INCIDENCE, 519 768

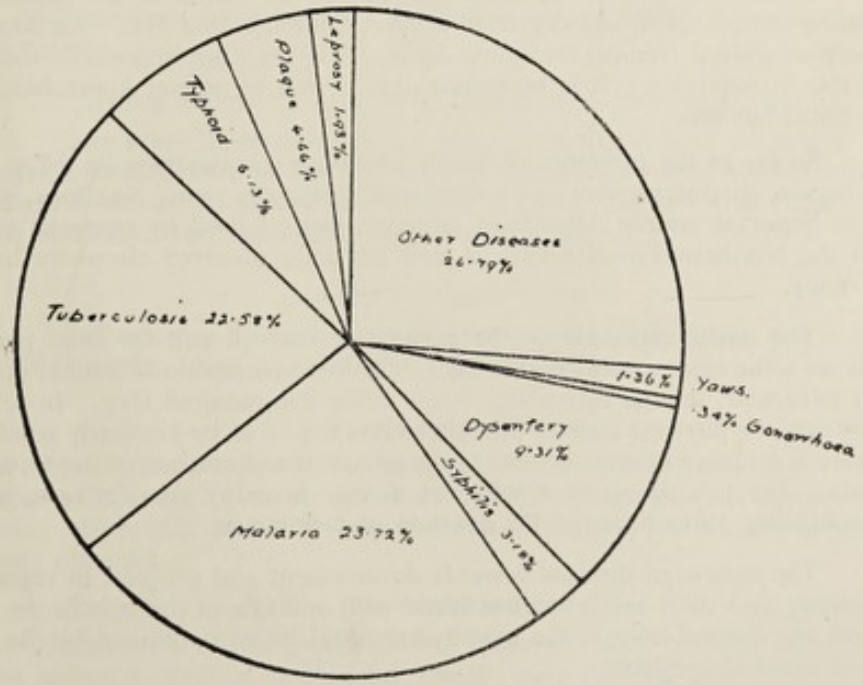


Proportion in Percentages of Epidemic, Endemic and Infectious Diseases, In-patients and Out-patients, treated at Hospitals and Dispensaries

TOTAL INCIDENCE, 94,401



TOTAL DEATHS. 881



II—PUBLIC HEALTH

GENERAL REMARKS

It is to be regretted that a general system applicable to the whole Colony for the registration of births and deaths has not yet been introduced and that the deductions which might otherwise be drawn with reasonable accuracy as to the improvement or retrogression of the public health must, therefore, give place to a more speculative assessment of the information obtainable from the annual district and institutional reports.

Despite the absence of machinery by which this information may be accurately collated and the efforts of measures directed towards the improvement of the public health carefully studied, the general impression can be drawn from a perusal of these reports that there has been some improvement in the public health and that the upward trend over the last few years in the general standard of living has been well maintained. Though the recent economic recovery has contributed to this advance, amongst other factors there emerges as important the reaction of the native himself, expressed in a practical fashion towards the long teaching and propaganda designed to interest him in better living conditions in general.

Local Native Councils have done much to further public health activities in their districts by generous grants for public health work and medical relief and by the recommendation and enactment of legislation to promote the public health. In a decade, their contribution to Medical Services has almost quadrupled. It will thus be evident that there is an increasing desire on the part of the native population for the furtherance of beneficial schemes, the only danger of which lies in the creation of a demand for services which, with the present staff and material available, it is difficult or impossible to meet.

The popularity of maternity and child welfare services is a case in point; there is general agreement that in this direction, given more equipment and staff, a very great extension would immediately take place. The extra accommodation provided in certain centres is already inadequate and there is an increasing demand for more.

Whilst it is difficult to assess the state of the health of the population during the year with any degree of accuracy, the fact that over 130,000 more people received medical treatment during 1937 does not necessarily indicate a rise in invalidity. It is more probably a sign of greater appreciation of medical facilities.

So far as the incidence of major infectious diseases may be taken as a criterion, conditions were much improved during the year. Smallpox, which was imported among Abyssinian refugees, was confined by energetic action to the Northern Frontier District and no cases occurred elsewhere in the Colony.

The nutritional state of the population, though still far from perfect, shows some evidence of improvement, but the consumption of animal protein in particular, though increasing, is far below the required level. In several districts the physical state of the inhabitants is said to be extremely good and there is evidence of some decline in the grosser manifestations of hypovitaminosis. The production of a sufficient dietary in many areas is now, in all probability, subordinate to the question of distribution.

The campaign directed towards development and progress in regard to housing and rural sanitation continued with enthusiasm throughout the year and was limited only to the extent that could be accomplished by the staff and material available.

It is satisfactory to be able to note the unabated interest shown in this matter, and particularly to record the increased provision of housing in permanent material, for improvement of housing is regarded as the essential basis for the furtherance of the general welfare of the population.

(1) General Diseases

The total number of new cases treated during the year at hospitals and dispensaries, but not including out-dispensaries, was 519,768.

The total of cases of all races treated as in-patients, including those remaining from 1936, was 52,703. Among these there occurred 2,735 deaths, giving a hospital death rate of 5.19 per cent.

Deaths within groups of diseases were attributable notably in descending order of importance; to epidemic, endemic and infectious diseases 32,18 per cent; diseases of the respiratory system 31.52 per cent; general diseases 9.03 per cent; diseases of the digestive system 7.65 per cent and external causes 6.80 per cent of the total deaths.

Of single causes of death, pneumonia stands pre-eminently the highest.

Epidemic, Endemic and Infectious Diseases

In this group 94,401 cases were recorded, with 881 deaths. Malaria was the highest single inclusion, there being 43,650 cases with 209 deaths, being 23.72 per cent of the deaths within this group, 3 deaths occurring among the European general population. Tuberculosis caused 22.58 per cent of deaths in the group, and dysentery 9.31 per cent, or 3 per cent of the total of deaths from all causes.

There were 243 cases of typhoid, the very great majority due to *B. typhosus* with 54 deaths, 6.13 per cent of group deaths. Dysentery cases numbered 3,404; amœbic 1,629, bacillary 172 and undefined 1,603.

General Diseases

There were 20,764 cases with 247 deaths. The prominent diseases in this group are rheumatism and anæmia of all types.

167 cases of malignant disease were recorded, 14 being in Europeans. Of the cases where the site of the disease was specified, it was shown to attack, in order of selectivity, the stomach and liver, the skin, the female reproductive organs, the breast, the buccal cavity and the peritoneum intestines and rectum. Three European deaths were recorded.

There were 3,947 cases of acute rheumatism, which is not uncommon in natives.

Affections of the Nervous System and Organs of Sense

There were 32,365 cases in this group, representing 6.21 per cent of total cases; and 81 deaths, or 2.97 per cent of total deaths. The number of cases of trachoma shown among eye diseases is by no means a true reflection of the incidence, which is undoubtedly much higher.

Circulatory System

1,762 cases, or 0.34 per cent of the total, were shown under this heading, with 51 deaths, being 1.87 per cent of the total deaths.

Respiratory System

80,979 cases were shown, being 16.58 per cent of total cases. There were 862 deaths, of which 807 were due to pneumonia, this disease alone being responsible for 29.51 per cent of all deaths. 1,144 cases of asthma were recorded.

Digestive System

There were in this group 129,540 cases, or 24.92 per cent of the total, the highest number of any group. Deaths were 7.65 per cent of the total.

Diarrhoea and enteritis accounted for 7,740 of the cases, with 1.49 per cent of all deaths.

There were 11,413 cases of caries and pyorrhoea.

Skin and Cellular Tissues

Of the diseases in this group, 71,876 cases were shown, being 13.85 per cent of the total incidence, ulcers alone representing 6.94 per cent. There is some evidence to indicate a seasonal occurrence of ulcers, injury being a prominent exciting cause.

External Causes

In this group were recorded 65,548 cases or 12.60 per cent of the total; with 186 deaths or 6.80 per cent of all deaths.

There were 1,129 cases of fracture.

(2) Communicable Diseases
MOSQUITO OR INSECT BORNE
Malaria

In 1937, 43,624 cases of malaria were treated in hospitals or dispensaries (other than out-dispensaries), as against 32,882 cases in 1936.

The cases were classified as follows:—

Tertian	1,863
Quartan	780
Aestivo-autumnal	11,572
Undifferentiated	4,823
Clinical	24,229
Cachexia	316
Cerebral	41

An epidemic wave of malaria affected practically the whole of the Colony during and after the long rains, which were abnormally heavy. The only areas where a heavy incidence was not recorded were the Fort Hall and Meru districts of the Central Province and Teita district in the Coast Province. In regard to the last mentioned, it is stated that malaria is now endemic at higher levels than formerly.

The town of Mombasa experienced the worst visitation of malaria for some years, the numbers rising excessively in May and June, and again in December. The reasons advanced for this marked outbreak in the face of control measures considered adequate were firstly, the occurrence of heavy and prolonged rains resulting in intense anopheline breeding, and secondly, the exiguity of staff employed by the Municipal Board.

In Nairobi, though the number of cases was higher than 1936, the incidence was declared to be lower in relation to the estimated marked rise in population over the preceding year. The admissions to the Native Hospital, which taps not only Nairobi but the surrounding districts, were higher than for the five preceding years with the exception of 1935. In Nairobi infection is heavy in well-defined areas adjacent to persistent anopheline breeding places. Especially during the epidemic period many cases of unusual severity were admitted to hospitals, and many cases of the cerebral type were treated.

Thirty cases of blackwater fever, with two deaths, were notified, a low number in relation to the general heavy incidence.

In the goldfield areas, malaria was at one time intense, and there were several cases of blackwater fever among Europeans. Particular reference is made to alluvial workings as a dangerous source of malarial infection, and at which centres blackwater fever is not uncommon.

Blackwater Fever

The comparative table of cases treated by the Government Medical staff for the past eight years is as follows:—

	Cases	*Deaths*
1930	50 ...	8
1931	41 ...	10
1932	52 ...	2
1933	28 ...	9
1934	45 ...	11
1935	37 ...	8
1936	24 ...	5
1937	26 ...	8

The comparative table of cases notified in the capital town of Nairobi for the past nine years is as follows:—

Year	*Cases*	*Year*	*Cases*
1929 ...	0	1934 ...	14
1930 ...	5	1935 ...	14
1931 ...	2	1936 ...	2
1932 ...	2	1937 ...	2
1933 ...	4		

Trypanosomiasis

Thirty cases of trypanosomiasis were treated as in-patients during the year. In addition 103 cases were discovered on examination of the population seen in dispensary practice, or during visits to special areas. Reports of cases limit the incidence to the Central and South Kavirondo districts of the Nyanza Province, in the Lake Basin. In these districts infection is confined almost exclusively to a moving population of native fishermen following their trade at rivers, the lake shore and islands, and other natives occupied there. People of all ages are attacked, and the following figures are indicative of the total incidence among natives examined in various parts of the Central Kavirondo District.

Number of natives examined	9,740
Gland and blood examinations	762
New cases	21
Positive: Gland and blood	14
Positive: Gland only	5
Positive: Blood only	2

History of cases:—

Average age	20.4 years
Male	15
Female	6
Average duration of illness	1.6 years

All those attacked were fishermen, cultivators and others whose occupation took them to the lake shore.

One case, a European employed near the Gori River, who complained of persistent headache for three weeks, made a complete recovery under treatment.

Plague

158 cases of plague were reported during 1937 as against 239 in 1936. Of these, 12 occurred in the European farming district of Nakuru, 11 coming from one farm alone. Of the remainder, 97 were recorded from the Fort Hall, Kiambu and Keruguya districts of the Central Province. In the two latter districts, outbreaks were confined to one section of the Reserve, and in the last the position as compared with previous years has much improved. 10 cases were verified in the Teita Hills, and 6 cases only in the Nyanza Province.

Twenty-five cases were notified as occurring within the Nairobi Municipal area. The recurrence of plague to this extent in the Capital is disappointing, and is probably intimately connected with the primitive state of housing in certain parts of the town.

Typhus

Twenty-four cases were recorded. Many cases occurred among Abyssinian refugees, fuller details concerning which appear in the relative section of this Report.

Infectious Diseases

Smallpox

Smallpox, imported by Abyssinian refugees, among whom two to three hundred cases occurred, was confined to the Northern Frontier District, and no cases occurred elsewhere in the Colony.

Pneumonia

In 1937, 4,048 cases of pneumonia were treated in Government hospitals, with 807 deaths as against 3,728 cases with 635 deaths in 1936. The hospital mortality rate was 19.93 per cent as against 17.03 per cent for the preceding year. The increase in the mortality rate is accounted for by the high degree of virulence in many cases, and concurrent epidemics of influenza and malaria.

Syphilis and Yaws

The number of cases treated at hospitals and dispensaries as apart from cases treated at out-dispensaries for the past three years is as follows:—

	1935	1936	1937
Syphilis	7,633	8,383	6,837
Yaws	11,378	12,258	13,131

Though a greater number of cases of yaws was treated, this was probably due to extension of medical activities, and appreciation of the dramatic effects of treatment in previous campaigns against this disease, rather than to an increased incidence.

The general impression is that yaws is definitely decreasing in most areas as the effects of previous campaigns against the disease are making themselves shown, as treatment facilities are extended, and also as a result of general improvement in public health.

In some of the more forward districts, the disease appears to be practically extinct, and it is stated that it is very rare now to see typical ulcerative yaws in Nairobi.

Tuberculosis

The comparative table of cases treated is as follows:—

Year	*Cases*	*Year*	*Cases*
1930 ...	756	1934 ...	1,145
1931 ...	874	1935 ...	1,162
1932 ...	886	1936 ...	1,201
1933 ...	969	1937 ...	1,391

The number of cases shown is certainly no true index of the general incidence, which it is impossible to estimate. Reasonably early cases given treatment as much on sanatorium lines as possible and with generous diet may progress favourably, though not often to the extent of resuming heavy labour. So many cases, however, are admitted in a hopelessly advanced condition that the hospital mortality figures are very high. An extension of facilities for sanatorium treatment is urgently required.

The results, on the other hand, obtained by surgical treatment of lesions of bones and joints are most encouraging.

Enteric

243 cases of the enteric group of fevers were treated as against 195 for 1936. Though the number of cases was higher, there was no suggestion at any time of an epidemic outbreak.

Dysentery

The classifications of cases treated is as follows:—

		1935	1936	1937
Amœbic	...	1,358	1,225	1,629
Bacillary	...	146	89	172
Undefined	...	951	897	1,603

The importance of amœbiasis as a cause of invalidity is stressed in reports from several districts, and there can be no doubt that the condition is widespread and that it may be seen in all its manifestations, including the rarer liver abscess. Conflicting reports, however, are made, especially as regards the saprophytic existence of *E. histolytica*. In view of this, it appears desirable that further work should be undertaken to determine the pathogenicity of *E. histolytica* in certain circumstances.

Dyptheria

Twenty-three cases with 3 deaths, all African, were reported, 6 cases only being treated in 1936.

The disease occurred in small outbreaks in widely separated parts of the country.

An investigation into the type and virulence of *C. diptheriæ* is proceeding.

Cerebro-Spinal Fever

There was a general decrease in the incidence of Meningococcal Meningitis, which occurred in sporadic fashion throughout the year in most areas, the number of cases being 227, compared with 319 in 1936 and 362 in 1935.

Anthrax

124 cases were reported during the year.

Undulant Fever

Notification of 12 cases was received, the serum of all cases showing positive aggultination against *Br. abortus*.

Leprosy

Leper patients are maintained in two Government Camps at Kakamega and Msambweni, while in addition 55 beds are reserved for these cases at several Mission Hospitals.

At Kakamega there were 179 cases under treatment during the year, and at Msambweni, 63. These numbers by no means indicate the true incidence of leprosy throughout the Colony, and there are indications that the incidence may be increasing. In both camps considerable improvement in buildings and accommodation generally was effected, and while neither was self-supporting, the patients are encouraged, as far as possible, to take an interest in the production of foodstuffs and small cash crops.

A large percentage of cases are of long standing, with much deformity; early cases or young patients rarely present themselves. On this account the results of treatment have not been striking, though 21 non-infective cases were discharged during the year.

In Kakamega, children born in the camp are removed to a school as soon as possible, and no cases of leprosy have been reported among the past inhabitants of the school. From this centre also a tentative scheme for the control of leprosy in the Kavirondo Reserve has been proposed. The scheme includes a census of lepers in the reserve, repatriation of burnt-out lepers from the Leper Colony to settlements in each location, restriction of admission to the Leper Colony to infected lepers in need of treatment, and the removal of children of leprotic parents immediately after birth. These proposals have been well received by a Committee of the Local Native Council, and very good results are anticipated when they are fully put into effect.

An extension of a similar scheme to embrace the needs of the whole Colony is receiving consideration.

Helminthic Diseases

The comparative table of cases treated during the past four years is as follows:—

	1934	1935	1936	1937
Ankylostomiasis	1,845	1,897	1,592	2,320
Ascariasis	8,158	7,777	9,318	9,292
Tæniasis	23,712	34,321	40,496	47,518
Schistosomiasis	453	571	623	868
TOTALS ..	34,168	44,566	51,029	59,998

The increase shown in the number of cases treated is probably due to greater accessibility of treatment, and while no decline in incidence is reported, there is reason to believe that in certain areas the intensity of helminthic infestation is less than formerly. The geographical distribution of Schistosomiasis is considered to be spreading.

VITAL STATISTICS

It is to be regretted that once again it becomes necessary to record that it has not yet been found possible to introduce a satisfactory system of registration of births and deaths and little, if any, machinery as yet exists for the collection, registration and analysis of information which is of considerable importance in connexion with the initiation and promotion of public health schemes.

The taking of a census occurs only at infrequent intervals and in the absence of any effective system for the constant and regular collection of certain prescribed facts, it is quite impossible to gauge with any degree of accuracy the progress of the public health. It is of the utmost importance that such information should be at the disposal of Government if public health administration is to proceed on organised and economic lines.

In the absence of this information it is impossible to calculate birth, death and infant mortality rates, and little more can be done than to reproduce the figures of the last census.

TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES AMONGST EUROPEAN AND NON-EUROPEAN OFFICIALS IN THE COLONY AND PROTECTORATE OF KENYA

	European			Non-European		
	1935	1936	1937	1935	1936	1937
Total number of officials resident ..	1,819	1,796	1,865	2,432	2,491	2,433
Average number resident	1,367	1,412	1,430	2,059	2,126	2,090
Total number on sick list	738	821	675	1,891	1,920	2,248
Total number of days on sick list ..	5,658	6,795	5,849	12,266	13,493	13,899
Average daily number on sick list..	15·50	18·56	16·03	33·60	36·87	38·08
Percentage of sick to average number resident	1·13	1·31	1·12	1·63	1·73	1·82
Average number of days on sick list to each patient	7·67	8·28	8·67	6·49	7·03	6·18
Average sick time to each resident ..	4·14	4·81	4·09	5·96	6·35	6·65
Total number invalided	8	9	* 4	† 8	† 12	† 7
Percentage of invaliding to total residents	0·44	0·50	0·21	0·33	0·48	0·29
Total deaths	2	6	6	2	3	7
Percentage of deaths to total residents	0·11	0·33	0·32	0·08	0·12	0·29
Percentage of deaths to average number resident	0·15	0·42	0·42	0·10	0·14	0·33
Number of cases of sickness contracted away from residence ..	—	—	—	—	—	—

**Invalidings.*—1 Ill health.
1 Neurasthenia.
1 Visual disturbance of the right eye and aggravation of defect in speech.
1 Lesion of the central nervous system.

†These cases were all Asians.

III—HYGIENE AND SANITATION

A—General Review of Work Done and Progress Made

(1) PREVENTIVE MEASURES

MOSQUITO AND INSECT BORNE DISEASES

Malaria

Nairobi.—Routine anti-malarial measures were continued throughout the year while experiments with various larvicides were carried out. The work consisted mainly of the maintenance and repair of existing drainage and measures directed towards the destruction of larvæ.

Kisumu.—Routine control methods have been employed on the same lines as in previous years. With money provided by a grant from the Colonial Development Fund, the following major works were undertaken:—

Kavirondo Gulf Head reclamation.—An extensive lake-shore swamp in the vicinity of the air port, which was formerly responsible for intensive *A. funestus* production was, to a large extent, reclaimed, the work included the removal of 52 acres of papyrus, the construction of a stone wall of 6,500 cubic feet and the insertion of 90,000 cubic yards of back filling. Successful experiments in the use of explosives for dispersing masses of papyrus were carried out.

Demolition of Native Village.—The demolition of an insanitary native village was completed and a new model village has been built on a more suitable site.

Tree planting.—Approximately 70 acres of land were planted with trees during the year.

Mombasa.—An entomological and clinical malaria survey terminated at the close of the year and much valuable information has been collected. Details are now being arranged in connexion with the execution of a land survey.

Kakamega.—Routine control continued under the supervision of a European Sanitary Overseer. Useful permanent work in respect to swamp reclamation and tree planting was also undertaken.

Smaller Townships and Administrative Centres.—Control methods adapted to varying conditions have been carried out satisfactorily in the smaller centres.

Yellow Fever

Yellow fever is still unrecorded in Kenya Colony and up to the present no mouse protection test has been positive. In view of the fact, however, that such tests have given positive results in Uganda and the Sudan, the Colony must be considered as vulnerable. Control measures have been continued, the details of which are to be found in the section of Medical Entomology.

Trypanosomiasis

Control measures by the "block and barrier" method were carried out during the year in the Kaniadoto–Kabwach areas of South Kavirondo, with funds contributed by the Local Native Council, who have also voted a grant for the continuance of this work in 1938. The considerable success which has attended the prosecution of these measures is well summed up in the report of the Medical Officer of the district, who states: "After the survey in 1927, nothing short of total evacuation of the population appeared to be sufficient to meet the situation. What freedom from infection now means to these thousands of natives, who previously had to expose themselves to certain infection to obtain the necessities of life, can scarcely be estimated by arbitrary standards of values."

The subject of the settlement of natives on reclaimed areas, under certain conditions, was discussed by the authorities in the district.

Under the Colonial Development Fund Scheme, a similar method has been employed extensively in Central Kavirondo at Port Victoria, where 500 natives are maintained on the Lake shore. At Port Southby, in the same district, its use has also been successful, and here cultivation on the Lake shore is taking place.

Plague

The intensive clearing and cleansing campaign undertaken in 1936 under the direct supervision of the Administration in a district in the Central Province was continued during the year.

The movement was also extended to adjoining districts. The position with regard to the endemicity of plague in the northern part of the Province, where the work was carried out, improved considerably.

Throughout the whole Province these preventive measures are proceeding, but the work is of such magnitude, in such a thickly populated area, that for its successful prosecution consideration may have to be given to increasing the Medical and Sanitary staff available. The work has become popular to a degree where the local population has agreed to the legal enforcement of necessary measures.

These measures include clearing and cleansing of villages and the improvement of grain stores with special reference to rat-proofing. In this connexion, over 75,000 rat-stops were sold during the year in the South Nyeri and adjoining districts. Provision has been made for the rapid manufacture and distribution of rat-stops.

The campaign has spread to include the improvement of housing, it having been found that an important source of infection lies in the poor type of native huts which afford harbourage to rats in their walls and roofs. Every effort, therefore, is being made in this direction, and facilities for the making of bricks are freely offered.

The voluntary trend towards housing improvements which is now such a noticeable feature in the Reserves, is worthy of every encouragement, and the demonstrable efforts arising from its provision are of great value in propaganda.

Smallpox and Vaccination

Apart from the Northern Frontier District, no mass vaccination was carried out during the year, but routine vaccination proceeded as usual at various centres. A total of 13,013 vaccinations was performed.

Dysentery and Enteric Fever

No special preventive measures were in force in regard to these conditions, but control is exercised as far as possible, especially in relation to water supplies and foodstuffs.

Tuberculosis

In the prevention of this disease reliance is placed mainly on the improvement of general sanitary conditions, particularly improvement in housing. The provision of isolation and treatment for the infective sick with the limited resources available is extremely difficult.

Helminthic Diseases

Latrine campaigns have been continued and in many native reserves latrines are now in fairly general use. Meat inspection is also carried out at all centres where the necessary staff is available.

(2) GENERAL MEASURES OF SANITATION

There has been a marked improvement in the general sanitation of the smaller townships and trading centres during the past few years, but much still remains to be done. A number of these townships have now been provided with water supplies, and night-soil and refuse disposal services are gradually being extended. In the larger towns steady improvement is also taking place, and sanitary conditions in general are, on the whole, fairly satisfactory.

(3) SCHOOL HYGIENE

No school medical service exists at the moment. In townships, and native reserves, however, as much time as possible is devoted by medical officers and sanitary inspectors to effecting improvements in the general hygiene of schools; and reports show that a great deal has been accomplished. The health of school children and dietary are also supervised as far as circumstances will allow.

(4) LABOUR CONDITIONS

Whilst the economic recovery which commenced in 1936 was maintained during the year, few industries were in the position to embark upon any large schemes for the improvement of labour conditions. The position at the present time, with regard to the recruitment, housing, feeding and general social welfare of African labourers cannot be described as altogether satisfactory. Conditions are satisfactory neither on farms nor estates nor, with a few notable exceptions, in industry in general, and as a result employers of all kinds are not getting full value for wages paid, while the State and various local authorities are involved in expenditure in various directions which should not be necessary.

The considerable shortage of labour which occurred on many estates during the year brought home the necessity for rendering conditions of labour more attractive in order to ensure the permanent supply of a sufficient and contented force.

It is now generally recognised that for the retention of labour, particularly on the larger estates and industrial concerns, consideration must be given to the provision of such essentials as good housing and dietary and facilities for education and recreation. It is perhaps not generally appreciated that these necessities, to an increasing degree, are becoming available in the native reserves and if labourers are to be attracted to the settled areas, it is essential that they should be provided with reasonable amenities. Though at first sight the financial implications of such a policy would appear to weigh heavily upon employers, a long range view would show that the reverse is the case, a contention which is borne out by the experience of large estates and industrial undertakings where such facilities have been provided.

While, during the year, no considerable advance in this direction took place, inquiries regarding matters of native welfare and requests for advice and assistance continued to be made to the Medical Department and many employers, fully appreciating the position, are effecting improvements in labour conditions as circumstances permit.

(5) HOUSING AND TOWN PLANNING

There have been no major schemes during the year. In Mombasa, the town planning scheme continues, and in Kisumu the old Bazaar re-planning scheme is now completed.

(6) FOOD IN RELATION TO HEALTH AND DISEASE

Inspection and Control

The inspection and control of food supplies is carried out at all centres where inspectorate staff is available, and detailed reports show that this work has proceeded with very satisfactory results.

It is not yet possible to provide for the routine examination of foodstuffs imported into the country at the port of entry.

Markets, Dairies and Slaughterhouses

In the native reserves work connected with improvement of markets and slaughter-houses has proceeded with success.

In Mombasa, the condition of the island dairies is still far from satisfactory.

In Nairobi, anticipating the approval of by-laws, the Municipal Council has established a depot to deal with milk coming from unregistered sources, and not intended for delivery at registered premises in the town.

Food Supplies

Food supplies in general throughout the reserves during the year were probably adequate in quantity, if inequitably distributed. Reports indicate that an expansion in production over the previous year took place, and that the use of foodstuffs of a European type is becoming more popular.

While some physical improvement is noticeable in certain tribes, it would be wrong at this stage to form any general impression, which may be entirely erroneous, as to the nutritional state of the native population, and it is a matter of urgency that this problem, which is recognised as an important part of public health work, should be investigated very fully.

Experience that is world-wide has shown that, from a diet poor quantitatively and qualitatively, there results under-nourishment and impairment of general physical health. Moreover, susceptibility to certain diseases is increased. The investigations which have been made in this Colony during the last decade, though by no means complete, are sufficient to demonstrate the existence and effects of widespread malnutrition, and the necessity of complete investigation into the cause and remedy.

B—Measures Taken to Spread the Knowledge of Hygiene and Sanitation

To assess the amount accomplished in this direction by propaganda and practical instruction in the daily course of the duties of the medical and sanitary staff, is a matter of impossibility, but it is certainly considerable, if gauged by results alone.

At the Show of the Royal Agricultural and Horticultural Society of Kenya, held in Nairobi, a very comprehensive health exhibit was staged in collaboration with other departments.

The native development exhibit was a centre of attraction and was well patronised. At the entrance pupils from the Medical Training Depot were in attendance as guides and African Health Workers demonstrated every exhibit. Local Native Councils were well represented, and great benefit has resulted from their visit on returning to their reserves.

The exhibit was laid out first of all to demonstrate a complete model native homestead, a furnished house and agricultural activities being shown in detail. A plan of the house, showing the approximate costs and quantities, was on view. On leaving the house, several exhibits in the hands of officers of different departments were seen, such as a Bush School, agricultural activities, forestry exhibits, a post office, Native Industrial Training Depot workshop and a Child Welfare Centre in the care of the Health Instructress, Jeanes School.

Further exhibits were market-places, protected water supplies, a butcher's shop and a native restaurant.

In addition an exhibit which attracted much interest was that designed to show methods of prevention of "measles" in cattle, while there was also a striking demonstration of the effects of malnutrition in rats.

Finally, mention should be made of a very comprehensive exhibition of photographs, displayed in another section, which illustrated African progress and activity in Kenya.

C—Training of Sanitary Personnel

The systematic training of African sanitary personnel has not yet been placed on an organised basis, but Africans, preferably those who have already had some training as artisans, have been engaged for work in the native reserves, and have been trained as sanitary assistants under the direct supervision of a European Sanitary Inspector.

D—Recommendations for Future Work

Whilst recommendations for future work are too numerous to mention in detail, activities in general should be aimed at gradually, raising the standard of living of those sections of the community which are on the threshold of development. A nutritional survey is one of the first essentials and this is of importance not only from the public health point of view, but also in connexion with the framing of a sound agricultural policy. It must also be emphasized that any appreciable rise in the standard of living and the improvement of sanitary conditions in general is dependent on the closest possible co-operation between the Agricultural, Education and Medical Departments.

IV—PORT HEALTH AND ADMINISTRATION

A—SEA PORTS

The number of vessels which entered Kilindini or Mombasa harbours during the past three years was as follows:—

	1935	1936	1937
Steamships	663	701	738
Dhows	1,391	1,489	1,427

	1936	1937
Steamship tonnage	2,192,588	2,223,183
Steamships medically inspected on arrival		144
Sailing ships, including native vessels, medically inspected on arrival ..		118
Vessels arriving in port infected		Nil
Vessels placed under quarantine restrictions or subjected to special sanitary measures		Nil
Passengers medically inspected under special small-pox regulations ..		13,423
Passengers landed subject to surveillance		266
Bills of health issued		1,074

Port Health Staff

(*a*) Port Health Officer (a Government Medical Officer, who is employed also as Medical Officer of Health to the Municipality of Mombasa).

(*b*) Sub-assistant Surgeon (part time).

(*c*) Clerk.

(*d*) Three Orderlies (African).

(*e*) Mosquito Searcher (African).

(*f*) Labourers, Rat-catchers, etc.

Intelligence

The weekly epidemiological bulletin broadcast by the Eastern Bureau of the League of Nations at Singapore, which ensures regular information concerning the condition of ports in its area with regard to infectious diseases and epizootics, was received with very few defects in transmission.

Examination of Ships on Arrival

The system established in 1933 remains in force, and owing to the regular receipt of epidemiological information from various sources, the Port Health Officer boards only a minor percentage of ships arriving at Kilindini or Mombasa.

All foreign dhows are boarded, and for a period during the year, coastal dhows were boarded on account of small-pox in the coastal area of an adjoining territory.

Infectious Diseases in Vessels

Steamers.—During the year no ship arrived with any major infectious disease among the passengers or crew.

Dhows.—No infected dhows arrived.

Infectious Diseases in the Port

The port remained free from infectious disease. No plague-infected rats were found.

Special Preventive Measures against the Introduction of Infectious Diseases

Regulations in reference to the landing of passengers from India remained in force throughout the year, and while some difficulties were experienced in their application, the number of passengers landed under surveillance, owing to unsatisfactory protection from smallpox, showed an appreciable decrease on the preceding year.

Sanitary Conditions of the Port

The model state of the sanitary conditions and general cleanliness of the port area at Kilindini, appreciated in previous reports, has been maintained by the Railways and Harbours Administration.

Rat Destruction

Owing to reorganisation of this work, more intensive trapping was possible, resulting in higher catches and greater freedom of the port area from rat infestation.

Rats trapped, 11,411; rats examined for plague, 633; rats found infected, nil.

Mosquito Breeding

Regular search of the port area and small craft for mosquito breeding was carried out, and appropriate action taken when necessary.

Importation of Used Clothing

The trade importation of second-hand clothing continues to increase, and 853 consignments were passed on accompanying certificates of disinfection as compared with 590 in 1936.

Inspection of Imported Food

It has been found impossible to arrange for the routine inspection of foodstuffs at the port, but examination is done on request by importers or the Agricultural Department. During 1937, 5,942 lb. of assorted foodstuffs were condemned, and destroyed under the supervision of the Port Authority or the Mombasa Municipality.

Treatment of Venereal Diseases in Seamen

Reference was made, in the Annual Report for 1936, to the inadequate facilities in Mombasa for the treatment of venereal diseases in seamen. By the kindness of the Railways and Harbours Administration, accommodation for a clinic was provided at the port. Unfortunately, owing to other varied duties, it was found that visits by the Port Health Officer could but be erratic and infrequent, and the clinic had perforce to be discontinued. The question of re-introduction and continuance of a treatment centre at the port is under consideration.

B—AIR PORTS

The position in regard to authorized landing grounds remains as indicated in the Report for 1936.

Mosquitoes at Airports

Aedes Aegypti

Surveys carried out during the year are summarized as follows:—

Kisumu—	
Adults:	
House searches made	4,305
Houses with *A. ægypti*	3
Index	0·007%
Mombasa—	
Adults:	
House searches made	4,902
Houses with *A. ægypti*	587 (—11·9%)
Index for Mombasa Island only	10%
Breeding Places:	
(*a*) House searches made	4,902
Houses with one or more breeding places	557 (—11·3%)
Index for Mombasa Island only	7·6%
Tree Holes:	
(*b*) Trees examined	7,193
Breeding index	0·2%
General breeding outside (i.e. in pots, tins, barrels, coco-nut shells, leaves, etc.):	
(*c*) Total number of breeding places for all species of mosquito	2,007
Number of *A. ægypti*	537 (—28%)
Percentage for Island only	34·6%
Nairobi—	
Tree Survey:	
Trees examined	88
Trees with *A. ægypti*	16 (—18·2%)

V—MATERNITY AND CHILD WELFARE

The four main agencies through which maternity and child welfare work is carried out are:—

(i) The Government Medical Department.

(ii) The Missionary Societies.

(iii) The Lady Grigg Welfare League.

(iv) The Municipal Council of Nairobi.

Maternity relief is included in the general medical work done by the five Missionary Societies which receive from Government grants amounting in all to £3,700.

The African Maternity Centre at Pumwani in Nairobi, the Indian Maternity Home, Nairobi, and the African Maternity Centre at Mombasa, which are branches of the Lady Grigg Welfare League, receive respectively £1,350, £250 and £700 per annum from Government funds, in addition to grants from the Municipal Council of Nairobi to the first two, and from the Municipal Board of Mombasa to the last.

The Municipal Council of Nairobi received a re-imbursement of 50 per cent of all expenditure incurred by it on the promotion of child welfare.

(1) Ante-natal and Child Welfare Work in the Larger Towns

A—WORK CARRIED OUT BY THE MEDICAL DEPARTMENT

Staff Retained by Government

Mombasa.—One lady medical officer, two European health visitors and African staff.

Eldoret.—One European health visitor and African staff.

At Mombasa, ante-natal and child welfare work is carried out at five centres. A marked rise in attendances and home visits paid by the staff was noticeable, these being 40,240 and 19,721 respectively, as compared with 33,931 and 16,317 for 1936.

At Eldoret, where there is one centre, the figures rose also, attendances being 4,931 and the number of home visits paid 4,975, as against figures of 3,669 and 4,410 for the preceding year.

B—WORK CARRIED OUT BY THE MUNICIPAL COUNCIL OF NAIROBI

Since 1935, when the Municipal Council of Nairobi assumed responsibility for ante-natal and child welfare in the area under its authority, there has been a steady increase in the amount of this work, which is carried out among Asians and Africans by one lady medical officer and four European health visitors.

During the year 1937, the total attendances were 60,999 and home visits paid 15,812, as compared with 37,548 and 12,532 in 1936.

(2) Maternity Work in the Larger Towns

At the African maternity hospitals maintained in Nairobi and Mombasa by the Lady Grigg Welfare League, 446 and 183 deliveries were conducted, respectively.

At the Indian Maternity Home in Nairobi, also managed by the same organisation, 274 deliveries were conducted.

Of 17 African midwives in training at Nairobi during the year 3 qualified. At the Indian centre, four probationers were in training, of whom one qualified.

At Eldoret, Nakuru and Kisumu, where African maternity cases are admitted to Government hospitals, the figures for the year were as follows:—

Eldoret	52
Nakuru	67
Kisumu	265

(3) Ante-natal, Maternity and Child Welfare Work in the Rural Areas

WORK CARRIED OUT BY THE MEDICAL DEPARTMENT

The significant progress made in this branch of medical work, referred to in the Report for 1936, has been maintained, and undoubtedly would have shown a greater increase still over 1936, had the necessary accommodation been available. The popularity of these services, therefore, is not to be judged only by the figures quoted below, which show a general increase over those for 1936. It is a fact that, in accordance with the appreciative demand shown, the scope of this work is immediately capable of considerable extension.

Figures for the year for maternity work are as follows:—

At Centres established with the help of Local Native Council funds in connexion with Government Hospitals—

	Cases
Kapsabet	43
Kiambu	408
Kisii	283
Keruguya	165
Kisumu (already mentioned)	265
Kisumu (out-centre)	102
Kakamega	47

At Government Hospitals—

	Cases
Kericho	18
Wesu	62
Kitui	4
Eldoret	52
Nairobi	45
Nakuru	67
Kilifi	6
Machakos	78
Fort Hall	27

At the Lady Grigg Maternity Centres—

	Cases
Nairobi (already mentioned)	446
Mombasa	183
At Mission Hospitals—	1,071

The comparative figures for the years 1936 and 1937 are as follows:—

	1936	1937
At centres established in connexion with Government Hospitals with the help of Local Native Council funds, and at Government Hospitals	1,278 ...	1,672
At the Lady Grigg Maternity Centres, Nairobi and Mombasa	548 ...	629
At Mission Hospitals	1,009 ...	1,071

VI—HOSPITALS, DISPENSARIES, OUT-DISPENSARIES, VENEREAL CLINICS, THE MENTAL HOSPITAL, MEDICAL WORK CARRIED OUT BY MISSIONARY SOCIETIES, ETC.

The number of patients treated at hospitals and dispensaries during the year was as follows:—

European In patients	European Out-patients	Asiatic and African In-patients	Asiatic and African Out-patients
1,788	2,765	50,915	466,469

In addition 669,135 first attendances were recorded at out-dispensaries in the native reserves.

IN- AND OUT-PATIENTS TREATED AT GOVERNMENT HOSPITALS, DISPENSARIES AND OUT-DISPENSARIES IN 1937

Hospitals in Townships	In-patients	Out-patients
European Hospital, Nairobi	734	—
Native Hospital, Nairobi	6,851	2,964
Mathari Mental Hospital, Nairobi	343	—
Infectious Diseases Hospital, Nairobi	1,305	—
Prison, Nairobi	1,644	7,403
General Dispensary, Nairobi	1,196	56,112
Loco. Dispensary, Nairobi	87	25,611
Police Dispensary, Nairobi	—	1,966
European Hospital, Mombasa	285	924
Native Hospital, Mombasa	3,288	36,889
Infectious Diseases Hospital, Mombasa	856	567
Child Welfare Centre, Mombasa	—	23,447
European Hospital, Kisumu	195	355
Native Hospital, Kisumu	3,394	23,362
Prison, Kisumu	403	854
Native Hospital, Nakuru	3,518	14,380
Native Hospital, Eldoret	1,662	5,054
Railway Dispensary, Eldoret	1,052	3,988
Native Hospital, Kitale	1,094	5,983
Total ..	27,907	209,859

HOSPITALS IN TURKANA AND NORTHERN FRONTIER PROVINCE AND LAMU

Districts	In-patients	Out-patients	Out-dispensaries
Lodwar	101	2,926	—
Lokitaung	251	2,871	—
Wajir	205	3,193	—
Garissa	—	4,245	—
Mandera	63	1,445	—
Moyale	140	6,042	—
Lamu	183	22,142	11,618
Total ..	943	42,864	11,618

HOSPITALS IN NATIVE RESERVES

Districts	In-patients	Out-patients	Out-dispensaries
Wesu	936	5,901	25,442
Kabarnet	292	5,242	13,473
Kitui	1,586	13,956	38,043
Kapenguria	370	6,532	1,941
Narok	411	4,476	11,877
Malindi	257	9,854	12,153
Kakamega	2,178	9,499	71,439
Kilifi	1,860	6,395	19,445
Kericho	1,371	5,889	9,176
Machakos	1,981	18,610	70,044
Muriranjas	774	8,912	—
Kisii	1,704	15,713	60,830
Nyeri	1,326	37,043	12,084
Fort Hall	1,818	13,463	31,235
Meru	1,309	24,148	43,380
Kiambu	2,422	17,525	22,179
Central Kavirondo District	—	—	82,147
Kisumu	—	—	32,064
Msambweni, Digo	704	2,921	8,936
Kapsabet	382	6,069	14,279
Keruguya	1,681	18,294	53,903
Tambach	265	5,992	—
Rumuruti	226	2,984	—
Total ..	23,853	239,958	634,070

SURGERY

The increase in the number of surgical operations performed in Government Hospitals during 1937 is again indicative of the general extension of medical work, and of the increasing confidence of the African in surgical treatment. The scope of the work in Nairobi now demands the permanent retention of a second surgeon to assist the Surgical Specialist. The total of operations on Europeans has fallen slightly below that of last year, due to the fact that in 1936 a number of Sigmoidoscopic examinations, performed in the course of an investigation of Amœbiasis, was included.

The table of operations performed throughout the country is shown in detail below:—

	1936		1937		*Totals*	
	Major	Minor	Major	Minor	1936	1937
On Europeans	342	463	280	389	805	669
On Asians ..	202	173	234	522	375	756
On Africans ..	1,890	12,745	2,485	13,040	14,635	15,525
TOTALS ..	2,434	13,381	2,999	13,951	15,815	16,950

DISEASES OF THE EYE

Under the control of the Opthalmic Specialist, who was appointed during the year, work in this direction is showing a steady increase and will undoubtedly expand a great deal in the near future. Two wards have been provided for the admission of eye cases at the Nairobi Native Hospital and, in addition, clinics are held daily at the General Dispensary. The results of this work have created a popularity which has led to a number of African patients coming from great distances to seek admission to the Nairobi Native Hospital. Trachoma would appear to be a good deal more common than the statistical returns suggest and numerous cases with other eye complaints have been found, on examination, to be suffering from trachomatous pannus.

319 African cases were admitted to the Nairobi Native Hospital during 1937, as compared with 266 and 137 in 1936 and 1935, respectively, and an average of 200 eye treatments was carried out daily.

ANÆSTHETICS

The increase in surgical work has naturally been attended by a corresponding increase in the number of anæsthetics administered which, for 1937, was 9,357, a considerably higher figure than that for 1936. Thought anæsthetics may be given by persons other than a medical officer, this only occurs when under his immediate supervision. Eight fatalities occurred under anæsthesia, but in every case the reports showed that the anæsthetic had been properly administered, and all due precautions observed, and that death was due to emergency or extraneous conditions.

In the Report of the Anæsthetist, Nairobi, the types of anæsthetics given during 1937 are classified as follows:—

(i) Local anæsthetics: Planocaine, Novocaine and Cocaine 246

(ii) General anæsthetics—

(*a*) Ethyl Chloride and Ether or Ether alone 901
(*b*) Chloroform 2
(*c*) Endo-tracheal 221
(*d*) Intravenous Evipan 41
(*e*) Spinal-Duracaine 2

Endo-Tracheal anæsthesia is the route of choice for administration in Tonsillectomy and in major abdominal operations, and has been found in practice to be very satisfactory.

Towards the end of the year the Noswarthy apparatus was brought into use. A few cases were induced with nitrous oxide, and contrary to expectations, a little difficulty was experienced. Though it is impossible by reason of cost to employ it as a routine, its use in selected cases gives the operator and anæsthetist an enhanced sense of confidence.

LIST OF OPERATIONS

Nature of Operation	Number Performed	
	Major	Minor
1.—*Stomach and Duodenum*—		
(*a*) For Perforated Ulcer	1	—
(*b*) Gastro-Enterostomy	3	—
(*c*) Gastrectomy	1	—
(*d*) Others	—	—
2.—*Intestines*—		
(*a*) Laparotomy	65	—
(*b*) Closure of Wounds	10	—
(*c*) Resection and Anastomosis	5	—
(*d*) Formation of Artificial Anus	4	—
(*e*) For Obstruction	21	—
(*f*) Appendicectomy	19	—
(*g*) For Volvulus	5	—
(*h*) For Intussusception	1	—
(*i*) For Perforated Ulcer	—	—
(*j*) Drainage of Peritoneal Abscess	17	2
(*k*) Others—		
Knife Wound	4	—
Tapping of Peritoneum, (Ascites)	—	1
Sub-phrenic Abscess	2	—
Retro-peritoneal cyst	2	—
Paracentesis	8	11
Closure of Caecostomy	2	—
Omentopexy	1	—
Removal of Mesenteric Teratoma	1	—
Carcinoma, caecum	—	1
3.—*Rectum and Anus*—		
(*a*) Excision of Rectum	—	—
(*b*) For Fissure and Fistula	7	8
(*c*) Ligature of Haemorrhoids	3	9
(*d*) Injection of Haemorrhoids	5	—
(*e*) Sigmoidoscopy	—	25
(*f*) Others—		
Prolapse of Rectum	1	5
Removal of Tumour	1	—
Stricture	—	3
Abscess-Ischio Rectal	—	6
Prostoscopy	—	3
4.—*Hernia*—		
(*a*) Inguinal 217 / " "S" 16	233	—
(*b*) Femoral	10	—
(*c*) Umbilical 5 / " "S" 2	7	—
(*d*) Scar	2	—
(*e*) Others (Specify) :		
Examphalos	1	—
5.—*Liver, Spleen and Pancreas*—		
(*a*) Hepatotomy	8	—
(*b*) Upon Gall Bladder and Bile Ducts	4	—
(*c*) Splenectomy	4	—
(*d*) For Pancreatitis	1	—
(*e*) Others—		
Hydatid Cyst.	2	—
Omentopexy	2	—
Exploration of Liver	—	2
Aspiration of Liver Abscess	—	1
6.—*Urinary System*—		
(*a*) For Renal Abscess	10	—
(*b*) Nephrotomy	—	—
(*c*) Nephrectomy	2	—
(*d*) Upon Ureters	22	—
(*e*) Cystotomy	11	4
(*f*) Prostatectomy	2	—
(*g*) Urethrotomy	9	13
(*h*) For Urethral Abscess and Fistula	8	11
(*i*) Cystoscopy	—	37
(*j*) Passage of Sounds	—	197
(*k*) Others—		
For Rupture of Urethra	3	—
Removal of calculus from penis	—	1

Nature of Operation	Number Performed	
	Major	Minor
7.—*Male Organs of Generation*—		
(*a*) Circumcision	22	503
(*b*) Amputation of Penis	2	—
(*c*) For Hydrocele	96	80
(*d*) For Varicocele	1	5
(*e*) Orchidectomy	7	—
(*f*) Others—		
Spermatocele	1	—
Plastic for Phagodena	—	1
Removal of Elephantiasis Tissue from Penis	—	1
Incision of Scrotum Abscess	—	3
Paraphimosis	—	2
Prostatic Massage	—	10
Scrotal Haematoma	—	2
Elephantiasis of Scrotum	3	—
Stricture	3	—
8.—*Female Organs of Generation*—		
(*a*) Ovariotomy	18	—
(*b*) Salpingectomy	28	—
(*c*) Myomectomy	2	—
(*d*) Hysterectomy	13	—
(*e*) Hysteropexy	14	—
(*f*) Caesarian Section	14	—
(*g*) For Extra-Uterine Gestation	9	—
(*h*) For Pelvic Abscess	16	—
(*i*) For Vesico-Vaginal Fistula	27	4
(*j*) Colporrhaphy and Perineorrhaphy	11	9
(*k*) Forceps Delivery	89	3
(*l*) Removal of Uterine Contents and Curettage	93	63
(*m*) Induction of Labour or Abortion	1	13
(*n*) Insufflation of Fallopian Tubes	5	9
(*o*) Examination and Manipulation	4	30
(*p*) Others—		
Gillan's Operation	1	—
Prolapse of Uterus	1	—
Rupture of Uterus	1	—
For Breech Presentation	9	1
Salpingostomy	1	—
For Cervical Erosion	—	1
Craniotiomy	11	—
For Transverse Presentation	2	—
Manual Removal of Placenta	3	—
Remington Hall's Intra-Uterine Glycerine	—	7
Repair	—	1
Ante-Partum Haemorrhage	—	1
Retained Placenta	—	2
9.—*Eye*—		
(*a*) Removal of Foreign Bodies	—	69
(*b*) Upon Lids	9	37
(*c*) Evisceration and Enucleation	46	1
(*d*) For Cataract	99	5
(*e*) Others—		
Trachoma	—	1
Iridectomy	39	—
Removal of Lens	1	—
Entropion	1	—
For Glaucoma	4	—
On Lachrimal Sac.	—	1
For Squint	—	3
On Conjunctiva	—	4
Examination under G.A.	—	3
10.—*Ear and Nose*—		
(*a*) Myringotomy	—	—
(*b*) Mastoidectomy	12	—
(*c*) Removal of Tumours	7	7
(*d*) Turbinectomy	4	6
(*e*) Resection of Septum	—	—
(*f*) Drainage of Sinuses	6	—
(*g*) Others—		
Paracentesis	—	1
Examination (G.A.)	—	3
Removal of Foreign Bodies	—	8

Nature of Operation	Number Performed	
	Major	Minor
11.—*Mouth, Throat and Neck*—		
(*a*) Extraction of Teeth	3	5,533
(*b*) Upon Jaws	12	9
(*c*) Upon Tongue	4	1
(*d*) Tonsillotomy, by guillotine	17	22
(*e*) Tonsillectomy, by dissection (Both including adenoidectomy)	53	11
(*f*) Tracheotomy	6	—
(*g*) Thyroidectomy	25	—
(*h*) For Tuberculous Glands	50	15
(*i*) Oesophagoscopy	2	3
(*j*) Bronchoscopy	1	—
(*k*) Others—		
Hygroma–neck	1	—
Foreign Body–Oesophagus	—	1
Enlarged Uvula cut short	—	16
Cancrum Oris	1	1
For Ranula	1	—
For Pharyngeal Tumour	1	—
Exploration of Parotid Gland	—	1
Lupus	—	1
Quinsy	—	1
12.—*Chest*—		
(*a*) Paracentesis	3	17
(*b*) For Empyema	10	8
(*c*) Lobectomy	1	—
(*d*) Others—		
Sinus–chest wall	—	3
For Spear Wound	—	1
For Aspiration–Chest	—	3
Resection of Tuberculous Ric	1	—
13.—*Mammary Glands*—		
(*a*) For Abscess	7	21
(*b*) Excision of Tumour	3	2
(*c*) Mastectomy	6	—
(*d*) Others—		
Alcohol Injection	—	1
14.—*Arteries, Veins and Nerves*—		
(*a*) For Aneurysm	3	—
(*b*) Injection of Varicose Veins	1	—
(*c*) Nerve Suture	2	—
(*d*) Others—		
2nd Haemorrhage	1	—
For Angeioma	2	—
Stretching Sciatic Nerve	—	6
Ligature of Artery	—	1
15.—*Cranium*—		
(*a*) Decompression	5	—
(*b*) Exploration	2	—
(*c*) For Fracture	19	—
(*d*) Drainage of Intracranial Abscess	2	—
(*e*) Removal of Intracranial Tumour	3	—
(*f*) Others—		
For Carcinoma of Orbit	1	—
For Maxillary Antrum.	1	—
16.—*Spinal Column*—		
(*a*) Lumbar Puncture	—	226
(*b*) Laminectomy	1	1
(*c*) For Tuberculosis	3	26
(*d*) Others—		
Injection of Nerves	—	1
For Myocele	1	—
For Fracture Dislocation	5	8
17.—*Bones*—		
(*a*) For Fracture : Open Methods	36	146
Closed Methods	17	192
(*b*) For Osteomyelitis	169	102
(*c*) Removal of Tumour	13	1
(*d*) Others—		
Pearson's Calliper		1
Bone Craft	1	1
For T. B. Sinus	4	—
Periostitis	—	1
Plasters	—	31
Sequestrectomy	22	4

Nature of Operation	Number Performed	
	Major	Minor
18.—*Joints*—		
(*a*) For Dislocation : Open Methods	11	2
Closed Methods	2	31
(*b*) Aspiration	3	52
(*c*) Arthrotomy : For Sepsis	42	17
For Removal of Loose Body	—	—
(*d*) Excision of Joint	10	13
(*e*) Manipulation	15	31
(*f*) External Fixation	6	36
(*g*) Others—		
Arthroplasty	1	—
For Tuberculosis	7	42
Application of Plaster for Rupture of Ligament–Knee	—	2
19.—*Amputations*—		
(*a*) Of fingers	47	122
(*b*) Of Hand and Forearm	16	1
(*c*) Of Arm	29	7
(*d*) Of Toes	18	66
(*e*) Of Foot and Leg	40	6
(*f*) Of Thigh	53	—
20.—*Plastic Operations*—		
(*a*) Skin Graft	37	656
(*b*) For Hare Lip and Cleft Palate	7	—
(*c*) Upon Vagina and Vulva	15	18
(*d*) For Contractures	3	10
(*e*) Others—	1	20
Plastic Repairs to Torn Ears	—	294
Upon Face	5	11
For Elephantiasis of Scrotum	1	—
On Abdomen	1	—
21.—*Orthopoedic Operations Not Otherwise Mentioned*—		
(*a*) Osteotomy	9	2
(*b*) Tenotomy	—	3
(*c*) Others—		
Tendon Suture	3	—
For Talipes	—	1
22.—*Conditions Unclassified Regionally*—		
(*a*) For Ulcers	106	1,413
(*b*) For Other Septic Conditions	88	1,097
(*c*) Suture and Treatment of Wounds	36	569
(*d*) Excision of Superficial Tumours	98	198
(*e*) Extraction of Foreign Bodies	8	73
(*f*) Removal of Glands	6	27
(*g*) For Bursitis and Ganglion	13	43
(*h*) Others—		
Sinus—leg	—	2
Abscesses	1	324
Whitlows	—	16
23.—*Operations Otherwise Unclassified*—		
(*a*) Aspiration of Cold Abscess	—	1
(*b*) Removal of Nail	—	25
(*c*) Foreign Bodies from Limbs	—	5
(*d*) Excision of Section of Growth	—	1
(*e*) Excision of Sinus	—	3
(*f*) Excision of Carbuncle	1	1
(*g*) Cleansing of Burn	—	10
(*h*) Elephantiasis (removal of fascia)	—	1
(*i*) Gunshot Wounds	—	16
(*j*) Suture of Wounds	—	1
(*k*) Biopsy	3	26
(*l*) Lymphangioplasty	1	—
(*m*) Haematoma	—	3
(*n*) Myeloma	2	—
(*o*) Keloids	2	—
TOTAL	2,485	13,040

EYE CLINIC, GENERAL DISPENSARY, NAIROBI

The following are details of work done and cases seen at the Eye Clinic held at the General Dispensary, Nairobi, during 1937.

	Europeans	Asians	Africans
Conjunctivitis	19	75	908
Trachoma	—	12	122
Tumours	—	—	4
Others	96	127	747
Total Number of New Cases	115	204	1,781
Number of Re-attendances	48	352	3,063
Number of Males	83	190	1,399
Number of Females	32	14	382
"Others" include Disease of—			
Orbit:			
Neuralgia	—	1	30
Cellulitis	—	—	—
Tumour	—	—	—
Injury	—	—	—
Extrinsic Musculature	—	—	2
Lids and Surrounding Structures:			
Blepharitis	—	—	16
Hardelum	2	4	13
Chalazion	2	4	35
Trichiasis, distichasis	—	—	8
Entropion	—	—	22
Ectropion	—	—	3
Injuries	3	3	26
Other Inflammation	2	3	20
Lachrimal Apparatus:			
Lacrimal Gland	—	—	1
Lacrimal Sac	—	—	1
Conjunctiva (other than Conjunctivitis and Trachoma):			
Pinguecula	—	2	7
Pterigium	1	2	10
Hæmorrhage	—	4	11
Tumour	—	—	—
Injuries	—	4	9
Others	1	—	8
Foreign Bodies	—	—	7
Cornea:			
Foreign Body	10	12	59
Opacities	—	1	35
Ulcers	—	5	43
Interstitial Keratitis	—	—	—
Other Forms of Keratitis	—	—	30
Injuries	4	2	20
Others	—	—	4
Lens and Vitreous:			
Cateract	—	4	47
Injuries	—	—	4
Others	—	—	—
Uveal Tract:			
Irido-cyclitis	—	3	27
Others	—	—	4
Injury	—	—	1
Retina:			
Detachment	—	—	—
Retinitis	—	—	1
Others	—	—	—
Optic Nerve and Central Connections:			
Papilleodema	—	—	—
Optic Neuritis	—	—	4
Atrophy	—	—	8
Night Blindness	—	—	2
Others	—	—	12
Glaucoma	—	—	6
Panophthalmitis	—	—	—
Vision Tests	—	55	47
Errors of Refraction	61	12	98
Miscellaneous	—	6	63

TRAINING OF AFRICANS

Hospital Assistants

There was no material alteration in the course of training for Africans intending to qualify as hospital assistants or nursing orderlies, which was carried out at the Medical Training Depot during the year. A short course in mental nursing is now included.

No new learners were taken on during the period under review, but eleven candidates qualified as hospital assistants at the examination held at the end of the year.

Compounders

Three compounders were in training during the year, and two passed the final examination.

Training of African Women

It has, as yet, not been possible to arrange for the systematic training in general nursing of African women, though it has been decided to commence in 1938 regular instruction in English and nursing for the African nurses engaged at the Native Hospital in Nairobi. Complete instruction must await the provision of facilities which, it is hoped, will be available on the construction of the proposed group hospital.

VENEREAL CLINICS

As in 1936, clinics for the treatment of venereal disease in women were held at five centres in Mombasa and at one in Nairobi, and for men at three centres in Nairobi and one in Mombasa.

Throughout the whole Colony, treatment of venereal disease is undertaken at all hospitals and dispensaries. Though good results are, in general, obtained, it is still difficult to persuade patients to undergo a full course of treatment, as many are satisfied when the obvious manifestations of infection disappear.

MEDICAL WORK CARRIED OUT BY MISSIONARY SOCIETIES

The number of hospital beds maintained by the Missionary Societies receiving medical grants from Government, the number of patients treated in these institutions, and the amounts of the grants given are shown in the followings tables:—

Missions	Place	No. of Beds	In-patients	Out-patients	Out-dispensary Patients	Confinements	Amount of Grant
							£
C.S.M. .	Kikuyu	90	1,281	18,168	Nil	207	450
„ .	Chogoria ..	67	840	7,688	not given	33	240
„ .	Tumutumu ..	98	2,192	27,048	88,082	442	1,050
C.M.S. .	Kaloleni	74	710	33,714	—	8	940
„ .	Maseno	67	2,054	11,591	24,305	245	420
S.D.A. .	Kendu	42	1,008	32,711	7,800	113	400
M.M.S. .	Meru	40	885	18,475	—	11	100
N.M.S. .	Ngao	18	74	1,859	1,424	12	100

C.S.M.—Church of Scotland Mission.
C.M.S.—Church Missionary Society.
S.D.A.—Seventh Day Adventists.
M.M.S.—Methodist Missionary Society.
N.M.S.—Neukirchen Mission Society.

At all the above-mentioned hospitals a qualified medical practitioner and one or more European sisters are employed.

VII—PRISONS AND ASYLUMS

PRISONS

The general health of prisoners was satisfactory, the percentage of prisoners on the sick list being 3.9, the lowest figure since 1933, though the number of deaths increased from 58 in the previous year, to 85 in 1937.

At Nairobi Prison an epidemic of influenza in the early part of the year caused a marked increase in the number of deaths, particularly from pneumonia. In the first half of the year, 35 deaths occurred, as compared with 32 for the whole of 1936, 22 in 1935, 31 in 1934 and 12 in 1933. The chief cause was the serious epidemic of influenza. Thirty deaths occurred from pneumonia. The death rate fell again in the second half of the year when there were only 10 deaths, making a total of 45 for the year.

In this connexion, it may be stated that arrangements are in hand for the building of a new hospital at the Nairobi Prison. As regards prisons in general, conditions cannot be described as altogether satisfactory. Buildings, in many cases, are old and dilapidated, sanitary conditions leave much to be desired and considerable overcrowding occurs.

The vital statistics for the prisons of the Colony for 1937 and for the last five years are as follows:—

Year	Daily Average in Prison	Admission to Hospital	Daily Average on Sick List	Percentage of Total Inmates	Deaths
				Per cent	
1937	2,975	2,988	116	3·9	83
1936	2,758	3,958	127	4·6	58
1935	2,751	2,817	120	4·4	60
1934	3,439	4,180	152	4·4	95
1933	2,893	2,967	112	3·9	41

The 83 deaths were from natural causes, and were due to the following diseases:—

Diseases	Nairobi Prison	All Other Prisons	Total
Pneumonia	26	29	46
Dysentery	5	—	5
Bronchitis	—	1	1
Malaria	—	1	1
Typhoid	—	2	2
Various	5	12	17
Tuberculosis	9	2	11
Total ..	45	38	83

Of the above one was a lunatic and one vagrant, and ten remands.

The question of the examination of prisoners on remand upon capital or other serious charges has received a good deal of attention during 1937.

It is recognised that mental derangement is very common in natives as is also mental deficiency and that the sooner after the prisoner is accused of a crime, he is observed by a doctor, the better. Medical evidence may thus be called upon at an earlier stage in the proceedings and the expense of a Supreme Court trial avoided.

In Nairobi, an arrangement has been made whereby the Senior Superintendent informs the medical officer in writing as soon as any accused man is committed to the prison on remand upon a capital charge. A form of examination has been worked out and is in experimental use, so that the medical officer is able to record his findings and his recommendations. This examination is carried out in collaboration with the Resident Physician, Mathari Mental Hospital.

Should the use of this form become universal, the examination of this type of criminal will be standardized and the chance of any point of medical importance in connexion with either defence or prosecution being missed, will be reduced to a minimum.

DETENTION CAMPS

The buildings provided for the accommodation of detainees are largely of a temporary kind and the sanitary arrangements can only be described as primitive in many cases. Serious overcrowding takes place at many detention camps at certain seasons of the year when epidemics of infectious disease are liable to occur.

THE MATHARI MENTAL HOSPITAL

The Care and Treatment of Aments and of Patients Suffering from Mental Disorders

Considerable improvements have been effected at this hospital during the past few years, and during 1937 additional accommodation was provided for male African patients. Much still remains to be done, but order is gradually emerging out of chaos, and if the present building programme is continued, a good hospital constructed on modern lines will eventually be provided for the care and treatment of aments and of patients suffering from mental disorders.

The following is a list of the classifications of the types of mental disorders from which patients suffered who were treated from the 1st July, 1937, to the 31st December, 1937, inclusive:—

Epileptics	18
Moral defects	7
Schizophrenia	63
Manic depressive	12
Puerperal	1
Organic reaction type	7
Unclassified	46
Senile	23
Neurospirochaetal	8
Feeble-minded	52
Idiots	1
Imbeciles	8
Paraphrenic	7
Huntingdon's Chorea	1
Total ...	254

General Statistics

The following table shows the number of admissions, discharges and deaths for the past three years, 1935, 1936 and 1937.

	Admissions			Discharges			Deaths		
	1935	1936	1937	1935	1936	1937	1935	1936	1937
Males	50	51	124	32	39	84	6	4	8
Females	39	31	29	13	18	17	2	3	6
Total ..	89	82	153	45	57	101	8	7	14

The total number of patients treated during the year was 343 (245 males and 98 females).

The total number of patient days in hospital was:—

	1935	1936	1937
European—Male and Female	1,244	1,488	1,182
Asian „ „ „	—	—	2,530
Native—Male	37,329	40,536	52,689
Native—Female	17,708	21,616	25,264
TOTAL ..	56,281	63,640	81,665

	1935	1936	1937
The average daily number was	154·19	173·87	223·73

Remaining at the end of 1935 .. 172—Males 113, Females 59.
Remaining at the end of 1936 .. 190—Males 121, Females 69.
Remaining at the end of 1937 .. 228—Males 153, Females 75.

EUROPEAN SECTION

The total number treated during 1937 was 11 (6 males and 5 females). The details are:—

	Males	Females
Remaining from 1936	2	3
Admitted during 1937	4	2
Discharged during 1937	5	2
Deaths during 1937	1	—
Remaining at end of 1937	—	3

TOTAL NUMBER OF DAYS RESIDENCE IN HOSPITAL:—

	1937
Of those discharged	643
Of those died	539
Of those remaining	3,399
TOTAL ..	3,366

ASIATIC SECTION

The total number treated during the year 1937 was 16. The details are:—

		Males	Females
Remaining from 1936		3	3
Admitted during 1937		9	1
Discharged during 1937		6	1
Died during 1937		—	—
Remaining at end of 1937		6	3
Male Indian	6		
Female Indian	2		
Female Seychelle	1		
Total ..	9		

Total number of days residence in hospital of:—

Those discharged during 1937..	821
Those remaining at end of 1937	17,468
Those who died during 1937	—
Total ..	18,289

AFRICAN SECTION

The total number treated during the year was 316 including 44 male and 5 female criminal patients.

The details are:—

	Males	Females
Remaining from 1936	116	63
Admitted during 1937	111	26
Discharged during 1937	73	14
Died during 1937	7	6
Remaining at end of 1937	147	69

The total number of days of these was:—

	Males	Females
Those discharged during 1937.. ..	18,024	13,772
Those remaining at end of 1937 ..	191,428	85,575
Those who died in 1937	5,391	3,497
Total ..	214,843	102,844

Patients were admitted during the year from the following places:—

	Males	Females
Nairobi	42	8
Machakos	1	—
Meru	4	3
Kiambu	5	1
Kikuyu	1	—
Fort Hall	8	4
Kitui	1	—
Eldoret	4	—
Kisii	5	—
Mombasa	18	6
Nyeri	4	2
Kisumu	8	3
Kitale	1	—
Nakuru	5	1
Tambach	1	—
Voi	3	—
Keruguyu..	1	—
Kericho	3	—
Kakamega	2	—
Kabarnet	—	1
Kajiado	1	—
Narok	1	—
Embu	3	—
Thika	1	—
Isiolo	1	—
Total ..	124	29

DISCHARGES, 1937

European	5 Males	2 Females
Indian	6 Males	1 Females
African	73 Males	14 Females

DEATHS

PERCENTAGE OF DEATHS TO TOTAL OF PATIENTS, 1929 TO 1937

YEAR	Patients	Deaths	Percentage
1929	250	25	10
1930	278	34	13·6
1931	236	38	16
1932	167	10	6
1933	153	5	3·26
1934	199	14	7·03
1935	225	8	3·55
1936	254	7	2·75
1937	343	14	4·08

VIII—METEOROLOGY

The statistics supplied by the Director of the British East African Meteorological Service are contained in Table IV appended to this report.

F. J. CARLYLE JOHNSTONE,
Acting Director of Medical Services.

ABYSSINIAN REFUGEES IN KENYA IN 1937

In June and July of 1937, some 7,000 Abyssinian refugees crossed the border into the Northern Frontier District to the east of Lake Rudolph. There were also about 370 who entered to the west of the Lake into Turkana. These two districts are in the main uninhabited, and problems of great difficulty were created by the incursion.

The refugees comprised fighting men fully armed and with modern weapons, servants, women and children. They came in numerous bands, usually each being under a leader, but not always, and there was no co-operation between the bands; in fact, at times a certain amount of hostility existed. They had at first a fair amount of stock and a considerable number of horses, mules and donkeys, but as the country is practically desert and the time of year was the end of the dry season, the great majority of the animals soon died.

Some of the people had plenty of money and much in the way of household goods, others were destitute; while their food supplies were in general most meagre.

On this account for a time they suffered practical starvation to a very large extent; while, in addition, their plight was rendered worse by the prevalence of diseases imported among them, the most important of which were smallpox, dysentery, typhus, relapsing fever, malaria, venereal disease and helminthic infestation.

The country where they were first met consists of stony hills, with water supplies that are very poor and difficult of access, while there is no grazing for stock. There are no roads, and the nearest administrative centre is Marsabit, which is nearly 200 miles away.

There arose the immediate problems of the supply of food and water to the people, the provision of shelter and medical attention for the sick; and the final evacuation of all the refugees to a place of temporary settlement, which was decided upon at Isiolo.

As there were between two and three hundred cases of smallpox, wholesale vaccination was undertaken to prevent further spread amongst them and also to protect the natives of Kenya from the disease.

For this purpose, too, every person engaged in dealing with the refugees, or who in any way came into contact with them was also vaccinated. The efficacy of this was abundantly proved, for not a single one of these persons contracted the disease, nor did a single person of one band of about 1,200 who, themselves free from smallpox, were met before they had encountered any of the others, and were promptly vaccinated.

Of the diseases dysentery enacted a heavy toll, and, it is estimated, accounted for the greatest number of deaths.

Typhus and relapsing fever, both louse-borne, were rife. The lice were found mainly in the great mops of hair which it was the custom of the Abyssinians to affect, and arrangements had to be made for shaving, the cleansing of persons and the boiling of garments. These measures were successful in reducing those diseases to unimportance for the time being.

Famine dropsy soon appeared and was very severe and troublesome, particularly among the young orphans of whom there was a number. It could not be adequately dealt with until the people reached Isiolo, where they were eventually placed in a permanent camp.

Besides these and other diseases, sheer starvation was rampant, again chiefly in the orphan children. In an effort to combat this a daily milk queue was organised and each child, and also starving adult, was given daily as large a quantity of milk as could be consumed. Several hundred daily were supplied, and the efficacy of this measure was marvellous.

Some 4,000 refugees were marched to Isiolo, partly from Karsa, about 340 miles off, and partly from North Horr, about 270 miles off. It is very satisfactory to record that only six died on the way, as the march was a very arduous one of about three weeks duration, over extremely difficult country for the most part of the way. The remainder were brought in lorries. They consisted of sick and aged, children under six years of age and those too weak to accomplish the journey on foot. Of these only five died on the way. The duration of the journey varied from 3 to 7 days according to circumstances. Temporary hospitals were established at Karsa and North Horr, and a rest camp at Ret near Marsabit. At Isiolo a large permanent camp with some 1,200 houses, well made latrines, storehouses, a piped water supply and a 300-bed hospital was opened on August 25th. At first a small number of departmental medical personnel was employed, 28 all told, but by the end of November had been entirely replaced, excepting for two Kenya native hospital assistants, by Abyssinian dressers and nurses who, with daily training, have proved satisfactory and reliable. The hospital was under the efficient charge of Drs. F. H. McKenna and Mrs. McKenna.

The main causes of illness among the refugees at the Isiolo camp were dysentery, famine dropsy and relapsing fever, which, like typhus, was louse-borne. Dysentery at first proved very troublesome, but declined later as general sanitary measures were steadily improved.

Famine dropsy was mainly encountered among the arrivals, who had developed it on the way, and yielded in a wounderful fashion to treatment.

Malaria was also common, and was believed to be in great part due to the lighting up of previously contracted infection.

Relapsing fever proved difficult of control, owing to the heavy infestation of the refugees' persons with lice, but various methods of prevention, readily accepted by the refugees, are now proving efficient.

Up to the end of the year, 178 deaths occurred, dysentery and oedema being the main causes in respective order of prominence.

An orphanage has been established under the care of the Church Missionary Society, and educational facilities have also been provided, while the work of child welfare is now flourishing under the supervision of Mrs. McKenna.

RETURNS

TABLE I—MEDICAL STAFF

A. R. Paterson, Director of Medical Services.

F. J. Carlyle Johnstone, Deputy Director of Medical Services.

Senior Medical Officer, Administration (1).

Senior Medical Officers (2).

Surgical Specialist (1).

Ophthalmic Specialist (1).

Medical Officers (36).

Senior Pathologist (1).

Assistant Pathologists (2).

Resident Physician, Mathari Mental Hospital (1).

Matron (1).

Housekeeper (1).

Nursing Sisters and Health Visitors (51).

Sanitary Inspectors (12).

Assistant Surgeons: European (2).

Assistant Surgeons: Asiatic (2).

Sub-Assistant Surgeons (24).

Asian Nursing Sisters (2).

PRINCIPAL CHANGES

(1) Dr. R. J. Harley-Mason to be Ophthalmic Specialist with effect from the 22nd June, 1937.

(2) Dr. G. F. Cobb to be Resident Physician, Mathari Mental Hospital, with effect from the 29th May, 1937.

Resignations.—

Nursing Sisters	6

Appointments Terminated.—

Sub-assistant Surgeons	4
District Surgeons	2
Visiting Physician, Mathari Mental Hospital	1
Nursing Sister	1
Wardmaster	1

Retirements.—

Lady Medical Officer	1
Nursing Sisters	2

Invalidings.—

Senior Medical Officer	1

TABLE II—FINANCIAL

The sanctioned medical budget for the year 1937 was a total of £210,448 as compared with £197,062 for the preceding twelve months.

The headings under which the vote was arranged were as follows:—

MEDICAL DEPARTMENT

	Estimates	Actual Expenditure
	£	£
Administrative Division—Personal Emoluments ..	9,452	9,246
Medical Division—Personal Emoluments	26,939	28,396
Sanitation Division—Personal Emoluments	4,936	4,834
Laboratory Division—Personal Emoluments	14,122	12,879
,, ,, Other Charges	28,149	27,743
£	83,598	83,229
Native Services—Personal Emoluments	75,318	72,615
,, ,, Other Charges	48,437	53,995
£	123,755	126,610
Extraordinary Expenditure	3,095	3,919

The total amount of revenue collected was as follows:—

	£	£
Hospital Fees	9,300	
Bills of Health	108	
Infectious Diseases Hospital, Fees, Nairobi Municipality	478	
Infectious Diseases Hospital, Fees, Mombasa Municipality	192	
Fees from Medical Research Laboratory	2,502	
Registration Fees	37	
Sales of Medicines, etc.	204	
Sale of Quinine	2,416	
Hire of Government Motor Vehicles (Ambulances) ..	67	
		15,304
Reimbursement from Uganda Government on Account of Zanzibar Sanitary Station	412	
Reimbursement from Kenya and Uganda Railways and Harbours on Account of Medical Services	6,089	
Reimbursement Mombasa Municipality on Account of Public Health Staff	758	
Reimbursement on Account of Messing Expenses, European Hospital, Nairobi	450	
		7,709
		£ 23,013

Last year the total revenue collected amounted to £23,392.

TABLE III—RETURN OF STATISTICS OF POPULATION FOR THE YEAR 1937

Colony and Protectorate of Kenya	Europeans and Whites	Africans and Others	Asiatics
Estimated Number of inhabitants in 1936	18,192	Africans— 3,186,976 Arabs and Others 14,458	Indians—38,653 Goans—3,577
Number of births registered in 1937	313	55	Indians—450 Goans—98
Number of deaths registered in 1937	119	1,710	Indians—468 Goans—33
Number of immigrants during 1937	6,258	2,743	Indians—11,919 Goans—793
Number of emigrants during 1937	5,868	1,988	Indians—8,476 Goans—687
Estimated Number of inhabitants at the end of December, 1937 ..	19,211	Africans 3,253,689 Arabs and Others 15,265	Indians—42,368 Goans—3,658

TABLE IV—METEOROLOGICAL RETURN FOR THE YEAR 1937

Month	Mean Temperature (°F)					Rainfall			Winds	
	Solar Maxim	Minimum on grass	Shade Maximum	Max. and Min. mean combined	Shade Minimum	Amount in Inches	Degree of Humidity Per cent		General Direction	Average force, 1–10
							8.30	14.30	8.30 a.m.	8.30 a.m.
Nairobi—										
January ..	..	..	81·8	69·5	57·2	0·23	69	39	NE	2
February ..	..	..	84·6	71·9	59·1	0·01	72	34	NE	2
March ..	..	..	81·0	68·3	58·9	5·54	81	52	NE	1
April ..	..	..	76·4	68·0	59·6	11·75	87	62	NNE	1
May ..	..	..	73·5	65·9	58·4	14·68	86	63	N	1
June ..	..	..	70·2	63·7	57·1	6·28	90	67	S	2
July ..	..	..	71·2	62·4	53·6	0·30	85	64	S	2
August ..	..	..	71·8	62·9	53·9	0·15	83	55	ESE	2
September	..	..	80·3	67·4	54·5	0·09	78	38	E	1
October ..	..	..	76·6	66·9	57·2	5·09	83	51	E	2
November..	..	..	76·8	67·5	58·2	6·66	83	54	E	2
December..	..	..	74·7	66·0	57·3	2·54	84	57	E	2
Mombasa—										
January ..	..	..	88·6	82·1	75·5	0·13	77	68	N	2
February ..	..	..	90·7	83·8	76·9	0·41	75	66	N	1
March ..	..	..	90·5	83·7	77·0	5·78	74	68	NNW	1
April ..	..	..	86·0	80·8	75·6	13·84	85	78	WSW	2
May ..	..	..	83·8	78·8	73·8	10·60	85	81	SW	2
June ..	..	..	83·9	78·9	74·0	3·78	79	72	SW	2
July ..	..	..	81·8	76·5	71·2	1·56	83	71	WSW	2
August ..	..	..	82·6	76·5	70·5	3·45	81	74	SW	2
September	..	..	83·9	78·3	72·7	3·31	80	72	SSW	2
October ..	..	..	84·9	79·7	74·7	9·77	79	75	SSW	2
November..	..	..	87·4	80·9	74·3	3·10	78	73	WNW	2
December..	..	..	87·8	83·3	74·8	4·11	78	73	NW	2
Kisumu—										
January ..	..	..	81·3	72·7	64·1	3·44	65	64	ENE	2
February ..	..	..	81·0	73·4	65·3	2·77	69	67	NE	2
March ..	..	..	80·5	73·0	65·5	7·01	71	63	NE	2
April ..	..	..	76·3	72·2	65·1	7·32	75	67	NE	1
May ..	..	..	79·8	72·1	64·3	10·04	75	60	NE	1
June ..	..	..	78·6	71·1	63·5	1·47	75	64	NE	1
July ..	..	..	77·8	70·1	62·3	1·85	75	66	NE	2
August ..	..	..	79·9	70·8	61·6	3·41	69	61	NE	2
September	..	..	82·8	72·6	62·4	0·88	61	57	ENE	2
October ..	..	..	82·4	73·2	64·0	4·18	65	62	E	2
November..	..	..	81·8	72·9	63·9	5·41	72	63	E	2
December..	..	..	81·9	72·5	63·2	3·65	65	59	ENE	2
Kabete Observatory										
January ..	..	45·3	77·0	65·9	54·9	0·35	69	41	NE	3
February ..	..	47·2	80·2	68·5	56·8	0·01	71	31	NE	3
March ..	..	52·3	76·8	67·2	57·6	8·33	80	44	NE	2
April ..	..	55·1	72·0	65·1	58·3	12·26	88	64	E	2
May ..	..	53·8	69·3	63·1	57·0	13·02	89	70	ESE	1
June ..	..	53·6	66·6	61·2	55·8	7·37	92	75	SSE	1
July ..	..	46·8	67·6	53·1	52·5	0·25	87	62	S	1
August ..	..	50·6	67·3	60·0	52·7	0·16	86	61	SSE	2
September	..	45·2	75·0	64·1	53·2	0·14	80	40	E	2
October ..	..	52·4	71·4	63·7	56·1	5·86	85	57	ENE	3
November..	..	52·9	71·8	64·4	57·0	9·01	87	58	NE	3
December..	..	48·5	70·0	62·9	55·9	3·43	86	63	NE	3

TABLE SHOWING TOTAL ANNUAL RAINFALL AT VARIOUS POINTS IN THE DIFFERENT AREAS FOR THE YEAR 1937

COAST AREA

Station	1937
	Inches
Malindi, District Commissioner's Office	39·07
Mombasa, Meteorological Observatory	57·84
Mazeras, K.U.R. & H.	40·22
Mackinnon Road	22·24
Voi, District Commissioner's Office	33·09
Taveta, Capt. Homer	36·42

MOUNTAINOUS AREA

Station	1937
	Inches
Masongaleni, K.U.R. & H.	63·68
Makindu, K.U.R. & H.	26·78
Athi River, K.U.R. & H.	28·86
Kiu, K.U.R. & H.	35·45
Nairobi, K.U.R. & H.	53·23
Kabete, Approved School	68·85
Naivasha, K.U.R. & H.	34·12
Nakuru, District Commissioner's Office	38·48
Molo, K.U.R. & H.	52·55

NYANZA AND KENYA PROVINCE

Station	1937
	Inches
Lumbwa, Mtaragon	54·85
Muhuroni, K.U.R. & H.	68·43
Kisumu, Marine Superintendent	51·38
Kakamega, District Commissioner's Office	81·85
Kerich, District Commissioner's Office	90·33
Nandi, District Commissioner's Office, Kapsabet	65·65
Fort Hall, District Commissioner's Office	70·25
Nyeri, District Commissioner's Office	42·19
Naro Moru, Kenya Park	27·69

TABLE V.

COLONY AND PROTECTORATE OF KENYA

RETURN OF DISEASES (In-Patients)

For the Year 1937

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
I.—Epidemic, Endemic, and Infectious Diseases																				
1. Enteric Group—																				
(*a*) Typhoid Fever	—	2	—	2	—	—	7	—	7	1	—	3	—	3	—	10	190	47	200	9
(*b*) Paratyphoid A.	—	—	—	—	—	—	2	1	2	—	—	—	—	—	—	—	1	—	1	1
(*c*) Paratyphoid B.	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	3	—	3	2
(*d*) Type not defined ..	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—	—	14	6	14	1
2. Typhus	—	3	—	3	—	—	4	—	4	—	—	—	—	—	—	—	1	1	1	—
3. Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2	174	4	176	4
4. Undulant Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	1	10	1
5. Malaria—																				
Undifferentiated	—	22	—	22	—	—	23	—	23	1	—	169	—	169	1	3	230	5	233	2
(*a*) Tertian	—	29	—	29	—	—	37	—	37	3	—	4	—	4	—	12	473	15	485	3
(*b*) Quartan	—	1	—	1	3	—	1	—	1	—	—	4	—	4	—	4	170	7	174	4
(*c*) Aestivo-autumnal ..	—	46	—	46	2	—	94	2	94	1	2	89	—	91	1	26	3,808	107	3,834	35
(*d*) Clinical	—	36	—	36	1	—	19	—	19	—	1	354	—	355	1	30	1,419	29	1,449	36
(*e*) Cachexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	28	8	31	—
(*f*) Blackwater	—	—	—	—	—	—	7	1	7	—	—	2	1	2	—	—	12	6	12	2
Cerebral	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	40	28	40	1
6. Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alastrim	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. Measles	—	2	—	2	—	—	7	—	7	—	—	—	—	—	—	7	286	5	293	4
8. Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9. Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	81	5	84	1
10. Diphtheria	—	—	—	—	—	—	5	—	5	—	—	—	—	—	—	—	10	3	10	—
11. Influenza	1	86	—	87	1	1	39	—	40	—	2	588	—	590	10	37	1,588	—	1,625	23
12. Miliary Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	—
13. Mumps	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—	17	219	—	236	1
14. Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15. Epidemic Diarrhœa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	1	48	—
16. Dysentery—																				
(*a*) Amœbic	1	32	—	33	1	1	31	—	32	1	—	5	—	5	—	32	706	42	738	16
(*b*) Bacillary	—	4	—	4	—	—	12	—	12	—	—	4	—	4	—	—	27	4	27	5
(*c*) Undefined or due to other causes	—	2	—	2	—	—	11	—	11	—	—	24	—	24	—	25	662	36	687	4

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
I.—Epidemic, Endemic, and Infectious Diseases—(*contd.*)																				
17. Plague—																				
(*a*) Bubonic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	49	35	50	—
(*b*) Pneumonic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	—
(*c*) Septicæmic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5	4	6	—
(*d*) Undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
18. Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19. Spirochætosis Ictero-hæmorrhagica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20. Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29	66	17	95	54
21. Erysipelis	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	7	3	7	—
22. Acute Polimyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
23. Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
24. Epidemic Cerebro-spinal Fever	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	4	211	134	215	9
25. Other Epidemic Diseases—																	2	—	2	—
(*a*) Rubeola (German Measles)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
(*b*) Varicella (Chicken-pox)	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	38	761	1	799	37
(*c*) Kala-azar	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
(*d*) Phlebotomus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*e*) Dengue	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*f*) Epidemic Dropsy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*g*) Yaws	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	701	12	744	61
(*h*) Trypanosomiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	26	1	27	2
Filariasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26. Glanders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27. Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	75	5	79	2
28. Rabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29. Tetanus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	44	22	47	2
30. Mycosis	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—
31. Tuberculosis, Pulmonary and Laryngeal	—	2	—	2	—	—	6	1	6	—	—	1	1	1	—	50	510	153	560	48
32. Tuberculosis of the Meninges or Central Nervous System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	7	7	—
33. Tuberculosis of the Intestines or Peritoneum	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	19	9	19	1
34. Tuberculosis of the Vertebral Column	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	7	2	11	2

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
I.—Epidemic, Endemic, and Infectious Diseases.—(*contd.*)																				
35. Tuberculosis of Bones and Joints	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	133	9	147	9
36. Tuberculosis of other Organs—																				
(*a*) Skin or Subcutaneous Tissue (Lupus)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	8	1	13	3
(*b*) Bones	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44	1	44	8
(*c*) Lymphatic System ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	91	1	91	7
(*d*) Genito-urinary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
(*e*) Other Organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	3	6	1
37. Tuberculosis, Disseminated—																				
(*a*) Acute	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	8	8	—
(*b*) Chronic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3	3	—
38. Syphilis—																				
(*a*) Primary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	861	—	921	43
(*b*) Secondary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	456	1	478	32
(*c*) Tertiary	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	13	170	9	183	11
(*d*) Hereditary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	85	18	87	3
(*e*) Period not indicated ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	74	—	94	1
39. Soft Chancre	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	—	39	4
40. A.—Gonorrhœa and its Complications	—	3	—	3	—	—	1	—	1	—	—	1	—	1	—	66	1,055	2	1,121	59
B.—Gonorrhœal Ophthalmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33	—	33	—
C.—Gonorrhœal Arthritis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	47	1	47	2
D.—Granuloma Venereum ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
41. Septicæmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61	49	61	2
Pyæmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	6	—	7	—
42. Other Infectious Diseases ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
II.—General Diseases not Mentioned Above																				
43. Cancer or other Malignant Tumours of the Buccal Cavity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	6	11	—
44. Cancer or other Malignant Tumours of the Stomach or Liver	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	33	25	34	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
II.—General Diseases not Mentioned Above—(*Contd.*)																				
45. Cancer or other Malignant Tumours of the Peritoneum Intestines, Rectum	—	—	—	—	—	—	2	1	2	—	—	—	—	—	—	—	6	3	6	1
46. Cancer or other Malignant Tumours of the Female Genital Organs	—	—	—	—	—	—	2	1	2	—	—	—	—	—	—	—	10	2	10	2
47. Cancer or other Malignant Tumours of the Breast	—	1	—	1	1	—	3	1	3	1	—	—	—	—	—	—	6	1	6	—
48. Cancer or other Malignant Tumours of the Skin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	15	1	18	1
49. Cancer or other Malignant Tumours of Organs not specified	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	5	67	22	72	5
50. Tumours, Non-malignant	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	16	249	2	265	10
51. Acute Rheumatism	1	4	—	5	—	—	—	—	—	—	—	87	—	87	—	1	123	1	124	3
52. Chronic Rheumatism	—	—	—	—	—	—	—	—	—	—	1	27	—	28	—	13	459	—	472	19
Rheumatic Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4	—
53. Scurvy (including Barlow's Disease)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	1	5	—
Other Deficiency Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2	3	—
54. Pellagra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	2	—
55. Beri-beri	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56. Rickets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4	—
57. Diabetes (not including Insipidus)	—	—	—	—	—	—	6	—	6	—	—	9	1	9	—	1	35	6	36	1
58. Anæmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	10	—
(*a*) Pernicious	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	15	—	16	1
(*b*) Other Anæmias and Chlorosis	—	—	—	—	—	—	3	—	3	—	—	—	—	—	—	12	148	8	160	4
59. Diseases of the Pituitary Body	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
60. Diseases of the Thyroid Gland—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	4	—	4	—
(*a*) Exophthalmic Goitre	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	18	2	18	3
(*b*) Other Diseases of the Thyroid Gland, Myxœdema	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	8	1	8	—
61. Diseases of the Para-thyroid Glands	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
62. Diseases of the Thymus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
II.—General Diseases not Mentioned Above—(*Contd.*)																				
63. Diseases of the Supra-renal Glands	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64. Diseases of the Spleen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	64	3	69	2
65. Leukæmia—																				
(*a*) Leukæmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	2	4	—
(*b*) Hodgkin's Disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
66. Alcoholism	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	2	39	—
67. Chronic Poisoning by Mineral Substances (Lead, Mercury, etc.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	5	—
68. Chronic Poisoning by Organic Substances (Morphia, Cocaine, etc.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
69. Other General Diseases—	—	—	—	—	—	—	—	—	—	—	—	7	—	7	—	—	—	—	—	—
Auto-intoxication	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Purpura Hæmorrhagica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	2	—
Hæmophilia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes Insipidus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—
Obesity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
III.—Affections of the Nervous System and Organs of the Senses																				
70. Encephalitis (not including Encephalitis Lethargica)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	4	10	1
71. Meningitis (not including Tuberculosis Meningitis or Cerebro-spinal Meningitis)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	31	23	32	2
72. Locomotor Ataxia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—
73. Other Affections of the Spinal Cord	—	1	—	1	—	—	—	—	—	—	—	1	—	1	—	—	2	—	2	—
74. Apoplexy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	2	—
(*a*) Hæmorrhage	—	—	—	—	—	—	3	1	3	—	—	—	—	—	—	—	7	4	7	—
(*b*) Embolism	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	2	—
(*c*) Thrombosis	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	5	2	5	1

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
III.—Affections of the Nervous System and Organs of the Senses.—(*Contd.*)																				
75. Paralysis—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*a*) Hemiplegia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	38	6	39	3
(*b*) Other Paralyses	—	—	—	—	—	—	1	—	1	—	—	1	—	1	—	4	60	4	64	12
76. General Paralysis of the Insane	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	7	1	7	—
77. Other Forms of Mental Alienation	—	1	—	1	—	5	7	1	12	—	—	—	—	—	—	216	296	15	512	244
78. Epilepsy	—	1	—	1	—	—	1	—	1	—	—	—	—	—	—	1	61	6	62	3
79. Eclampsia Convulsions (Non-puerperal) 5 years or over)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80. Infantile Convulsions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	11	3	12	1
81. Chorea	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
82. A.—Hysteria	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	31	—	31	—
B.—Neuritis	—	—	—	—	—	—	3	—	3	—	—	32	—	32	1	1	54	—	55	2
C.—Neurasthenia	—	4	—	4	—	1	4	—	5	—	—	12	—	12	—	1	8	1	8	—
Neuralgia	—	1	—	1	—	—	1	—	1	—	1	2	—	3	—	2	87	—	88	—
83. Cerebral Softening	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
84. Other Affections of the Nervous System, such as Paralysis Agitans	—	1	—	1	—	—	3	—	3	—	—	—	—	—	—	2	33	1	35	2
85. Affections of the Organs of Vision—																				
(*a*) Conjunctivitis	—	1	—	1	—	—	1	—	1	—	—	33	—	33	—	11	461	—	472	12
(*b*) Trachoma	—	—	—	—	—	—	—	—	—	—	—	7	—	7	—	5	84	—	89	5
(*c*) Tumours of the Eye	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	2	15	1
(*d*) Other Affections of the Eye	—	5	—	5	—	—	5	—	5	—	—	21	—	21	—	26	471	3	497	29
86. Affections of the Ear or Mastoid Sinus	—	5	—	5	1	—	16	—	16	—	—	7	—	7	—	6	136	2	142	6
Sciatica	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	10	—	11	—
IV.—Affections of the Circulatory System																				
87. Pericarditis	—	—	—	—	—	—	1	—	1	—	—	1	—	1	—	—	3	2	3	—
88. Acute Endocarditis or Myocarditis	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	1	10	2	11	—
89. Angina Pectoris	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
IV.—Affections of the Circulatory System.—(*Contd.*)																				
90. Other Diseases of the Heart ..	1	4	—	5	—	—	6	1	6	—	—	—	—	—	—	—	30	4	30	2
(*a*) Valvular	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	31	11	31	1
Mitral	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—	1	53	10	54	4
Aortic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	2	7	1
Tricuspid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
(*b*) Myocarditis	—	1	—	1	—	—	2	1	2	—	—	4	1	4	3	—	27	11	27	2
91. Diseases of the Arteries—																				
(*a*) Aneurism	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	2	—	2	1
(*b*) Arterio-Sclerosis	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	3	—	3	—
(*c*) Other Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
92. Embolism or Thrombosis (Non-cerebral)	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
93. Diseases of the Veins.. ..	—	5	—	5	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Hæmorrhoids	1	4	—	5	—	—	11	—	11	—	—	15	—	15	—	1	42	—	43	1
Varicose Veins	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5	—	6	—
Phlebitis	—	1	—	1	—	1	1	—	2	—	—	—	—	—	—	1	9	2	10	—
94. Diseases of the Lymphatic System	—	1	—	1	—	—	2	—	2	—	—	—	—	—	—	—	20	—	20	2
Lymphangitis	—	4	—	4	—	—	1	—	1	—	—	2	—	2	—	—	36	—	36	1
Lymphadenitis, Bubo (Non-specific)	—	1	—	1	—	—	—	—	—	—	—	2	—	2	—	9	168	1	177	6
95. Hæmorrhage of Undetermined Cause	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	2	—	2	—
96. Other Affections of the Circulatory System	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	8	1	8	1
V.—Affections of the Respiratory System																				
97. Diseases of the Nasal Passages	—	1	—	1	—	—	6	—	6	—	—	—	—	—	—	—	—	—	—	—
Adenoids	—	3	—	3	—	1	3	—	4	—	—	1	—	1	—	1	16	1	17	—
Polypus	—	—	—	—	—	—	2	—	2	—	—	1	—	1	—	—	8	—	8	—
Rhinitis	—	3	—	3	—	1	2	—	3	—	—	5	—	5	1	1	6	—	7	—
Coryza..	—	5	—	5	—	—	7	—	7	—	—	21	—	21	—	1	64	—	65	1

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
V.—Affections of the Respiratory System—(*Contd.*)																				
98. Affections of the Larynx ..	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—
Laryngitis	—	1	—	1	—	—	2	—	2	—	—	4	—	4	—	—	37	2	37	—
99. Bronchitis—																				
(*a*) Acute	1	19	1	20	—	—	10	—	10	—	1	62	—	63	—	27	1,124	17	1,151	30
(*b*) Chronic	—	—	—	—	—	—	3	—	3	—	—	12	—	12	—	7	292	8	299	5
100. Broncho-pneumonia	—	—	—	—	—	—	4	1	4	—	—	1	—	1	—	18	640	221	658	24
101. Pneumonia—																				
(*a*) Lobar	—	2	1	2	—	1	9	1	10	—	—	1	—	1	—	30	1,240	306	1,270	54
(*b*) Unclassified	—	—	—	—	—	2	2	1	4	—	—	7	1	7	—	34	1,034	275	1,068	34
102. Pleurisy, Empyema	—	2	—	2	—	—	1	1	1	—	—	4	—	4	—	4	108	10	112	5
103. Congestion of the Lungs ..	—	1	—	1	—	—	1	—	1	—	—	—	—	—	—	—	17	3	17	—
104. Gangrene of the Lungs ..	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	8	2	8	—
105. Asthma	—	—	—	—	—	—	1	—	1	—	—	26	—	26	—	4	185	5	189	6
106. Pulmonary Emphysema ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
107. Other Affections of the Lungs	—	—	—	—	—	—	4	—	4	—	—	—	—	—	—	2	35	5	37	4
Pulmonary Spirochætosis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pleurodynia	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	6	—	6	—
VI.—Diseases of the Digestive System																				
108. A.—Diseases of Teeth or Gums	—	5	—	5	—	—	5	—	5	—	—	—	—	—	—		22	—	22	—
Caries	—	5	—	5	—	—	—	—	—	—	—	16	—	16	—	—1	51	—	52	1
Pyorrhœa	—	—	—	—	—	—	1	—	1	—	—	3	—	3	—	—	10	—	10	—
B.—Other Affections of the Mouth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	1	8	—
Stomatitis	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—6	65	6	71	—
Glossitis, etc.	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	7	1	7	3
109. Affections of the Pharynx or Tonsils	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	16	2	16	—
Tonsilitis	1	22	—	23	—	2	79	—	81	—	—	30	—	30	—	—2	294	3	296	—
Pharyngitis	—	9	—	9	—	—	5	—	5	—	—	18	—	18	1	3	71	1	74	7
110. Affections of the Œsophagus..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	2
111. A.—Ulcer of the Stomach ..	—	1	—	1	1	1	2	—	3	1	—	1	—	1	—	—	7	—	7	—
B.—Ulcer of the Duodenum..	—	—	—	—	—	—	3	—	3	1	—	1	—	1	—	—	7	2	7	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
VI.—Diseases of the Digestive System.—(*Contd.*)																				
112. Other Affections of the Stomach	—	1	—	1	—	1	7	—	8	—	—	—	—	—	—	2	8	2	10	—
Gastritis	—	17	—	17	—	1	17	—	18	—	—	18	—	18	—	—	47	1	47	—
Dyspepsia	—	5	—	5	—	—	1	—	1	—	—	13	—	13	—	—	168	—	168	1
113. Diarrhœa and Enteritis	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—
Under two years	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	284	69	285	3
114. Diarrhœa and Enteritis—																				
Two years and over	—	22	—	22	—	—	21	—	21	—	—	25	—	25	—	2	386	28	388	3
Colitis	1	7	—	8	—	—	8	—	8	—	1	28	—	29	—	—	41	2	41	15
Ulceration	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
114A. Sprue	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—
115. Ankylostomiasis	—	1	—	1	—	—	4	—	4	1	—	—	—	—	—	44	828	7	872	42
116. Diseases due to Intestinal Parasites—																				
(*a*) Cestoda (Tænia)	—	1	—	1	—	—	4	—	4	—	—	—	—	—	—	7	944	—	951	7
(*b*) Trematoda (Flukes)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
(*c*) Nematoda (other than Ankylostoma)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
Ascaris	—	—	—	—	—	—	2	—	2	—	—	2	—	2	—	24	639	3	663	15
Trichocephalus dispar	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	64	—	69	1
Trichina	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Dracunculus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4	—
Strongylus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	57	—	60	2
Oxyuris	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	9	—	12	—
(*d*) Coccidia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*e*) Other Parasites	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21	1	21	1
(*f*) Unclassified	—	14	—	14	—	—	—	—	—	—	—	—	—	—	—	10	408	2	418	1
117. Appendicitis	—	10	—	10	1	2	58	1	60	1	1	9	1	10	1	3	68	6	71	1
118. Hernia	—	9	—	9	—	—	9	—	9	—	—	2	—	2	—	8	255	11	263	13
119. A.—Affections of the Anus	—	—	—	—	—	—	4	—	4	—	—	—	—	—	—	—	—	—	—	—
Fistula, etc.	—	3	—	3	—	—	2	—	2	—	—	5	—	5	—	—	51	2	51	1
B.—Other Affections of the Intestines	—	3	—	3	—	—	—	—	—	—	—	1	—	1	—	—	36	16	36	2
Enteroptosis	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	1	—	1	—
Constipation	—	1	—	1	—	—	—	—	—	—	—	6	—	6	—	4	405	—	409	5

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
VI.—Diseases of Digestive System—(*Contd.*)																				
120. Acute Yellow Atrophy of the Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
121. Hydatid of the Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
122. Cirrhosis of the Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	6	14	3
(*a*) Alcoholic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	—
(*b*) Other Forms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	4	22	—
123. Biliary Calculus	—	2	—	2	1	—	8	—	8	1	—	—	—	—	—	—	1	—	1	—
124. Other Affections of the Liver	—	1	—	1	—	—	1	—	1	—	—	—	—	—	—	—	1	—	1	—
Abscess	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	21	4	22	—
Hepatitis	1	—	—	1	—	—	1	—	1	—	—	6	—	6	—	5	102	8	107	4
Cholecystitis	—	1	—	1	—	1	4	—	5	—	—	2	—	2	—	—	14	1	14	—
Jaundice	—	2	—	2	—	—	6	—	6	—	—	2	—	2	—	—	37	1	37	1
Colic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
125. Diseases of the Pancreas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—
126. Peritonitis (of unknown cause)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	5	17	—
127. Other Affections of the Digestive System	—	6	—	6	—	—	7	—	7	—	—	4	—	4	—	1	157	9	158	2
Colic	—	1	—	1	—	—	2	—	2	—	—	1	—	1	—	—	22	—	22	—
VII.—Diseases of the Genito-urinary System (Non-venereal)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	10	—
128. Acute Nephritis	—	1	—	1	—	—	—	—	—	—	—	3	—	3	—	6	92	24	98	3
129. Chronic Nephritis	—	1	1	1	—	—	2	1	2	—	—	1	—	1	—	1	43	16	44	1
130. A.—Chyluria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
B.—Schistosomiasis	—	3	—	3	—	—	2	—	2	—	—	—	—	—	—	15	338	5	353	6
131. Other Affections of the Kidneys	—	3	—	3	—	—	15	2	15	—	—	5	—	5	—	—	23	5	23	—
Pyelitis	—	1	—	1	—	—	12	—	12	—	—	2	—	2	—	1	6	—	7	—
132. Urinary Calculus	—	4	—	4	—	—	5	—	5	—	—	—	—	—	—	—	8	—	8	—
133. Diseases of the Bladder	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	6	1	6	—
Cystitis	—	2	—	2	—	—	5	—	5	—	—	4	—	4	—	6	54	4	60	—
134. Diseases of the Urethra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—
(*a*) Stricture	—	3	—	3	—	—	—	—	—	—	—	2	—	2	—	3	39	2	42	5
(*b*) Other	—	1	—	1	—	1	2	—	3	—	—	1	—	1	—	1	58	—	59	2
135. Diseases of the Prostate	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	4	—	4	—
Hypertrophy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
Prostatitis	—	—	—	—	—	—	3	—	3	—	—	—	—	—	—	1	6	2	7	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					Europea General Populationn (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of bear	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
VII—Diseases of the Genito-urinary System (Non-venereal) —(*Contd.*)																				
136. Diseases (Non-venereal) of the Genital Organs of Man ..	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	160	—	161	4
Epididymitis	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	25	—	25	—
Orchitis	—	1	—	1	—	—	3	—	3	—	—	1	—	1	—	3	74	—	77	1
Hydrocele	—	—	—	—	—	—	1	—	1	—	—	1	—	1	—	4	106	2	110	1
Ulcer of Penis	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	30	—	30	1
137. Cysts or other Non-malignant Tumours of the Ovaries ..	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	20	1	20	4
138. Salpingitis	—	—	—	—	—	—	3	—	3	—	—	—	—	—	—	1	75	—	76	—
Abscess of the Pelvis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	1	15	—
139. Uterine Tumours (Non-malignant)	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	38	1	39	—
140. Uterine Hæmorrhage (Non-puerperal)	—	1	—	1	—	—	1	—	1	—	—	—	—	—	—	—	7	—	7	—
141. A.—Metritis	—	—	—	—	—	—	7	—	7	—	—	—	—	—	—	3	50	—	53	2
B.—Other Affections of the Female Genital Organs ..	—	1	—	1	—	—	30	—	30	—	—	—	—	—	—	12	152	3	164	9
Displacement of Uterus	—	—	—	—	—	—	6	—	6	—	—	—	—	—	—	—	17	1	17	1
Amenorrhœa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	30	—
Dysmenorrhœa	—	1	—	1	—	—	2	—	2	—	—	—	—	—	—	2	22	—	24	1
Leucorrhœa	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	3	—	3	—
142. Diseases of the Breast (Non-puerperal)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Mastitis	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	2	69	—	71	2
Abscess of Breast	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	15	1	16	—
VIII.—Puerperal State																				
143. A.—Normal Labour	—	—	—	—	—	—	11	—	11	1	—	—	—	—	—	28	1,347	2	1,375	44
B.—Accidents of Pregnancy—																				
(*a*) Abortion	—	—	—	—	—	—	12	—	12	—	—	—	—	—	—	4	205	1	209	1
(*b*) Ectopic Gestation ..	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	1	8	3	9	—
(*c*) Other Accidents of Pregnancy	—	—	—	—	—	—	3	—	3	—	—	—	—	—	—	9	132	12	141	2

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
VIII.—Puerperal State—(*Contd.*)																				
144. Puerperal Hæmorrhage ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	2	6	—
145. Other Accidents of Parturition	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	155	20	161	4
146. Puerperal Septicæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	44	25	45	1
147. Phlegmasia Dolens	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	—	4	—
148. Puerperal Eclampsia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	1	5	1
149. Sequelæ of Labour	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	32	3	32	1
150. Puerperal Affections of the Breast	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	3	—	3	—
Cæsarian Section	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
IX.—Affections of the Skin and Cellular Tissues																				
151. Gangrene	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	3	39	15	42	3
152. Boil	—	5	—	5	—	—	4	—	4	—	—	19	—	19	—	5	61	1	66	—
Carbuncle	—	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	19	—	19	2
153. Abscess	—	5	—	5	—	—	22	—	22	—	—	14	—	14	1	35	940	10	975	44
Whitlow	—	1	—	1	1	—	2	—	2	—	—	1	—	1	—	2	44	—	46	—
Cellulitis	—	8	—	8	—	1	16	—	17	—	—	16	—	16	—	26	398	13	424	13
154. A.—Tinea	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23	—	23	3
B.—Scabies	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	4	152	3	156	3
155. Other Diseases of the Skin ..	—	2	—	2	—	—	11	—	11	—	—	1	—	1	—	6	135	—	141	2
Erythema	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	4	—	4	—
Urticaria	—	—	—	—	—	—	—	—	—	—	—	9	—	9	—	—	20	—	20	1
Eczema	—	1	—	1	—	—	1	—	1	—	—	17	—	17	1	5	101	—	106	2
Herpes	—	—	—	—	—	—	1	—	1	—	—	5	—	5	—	—	18	—	18	—
Psoriasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
Elephantiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	44	—	48	1
Myiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	15	—
Chigoes	—	—	—	—	—	—	1	—	1	—	—	2	—	2	—	5	71	—	76	2
Cutaneous Leishmaniasis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
Ulcers	—	2	—	2	—	—	1	—	1	—	—	6	—	6	—	342	3,889	15	4,231	288

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
X.—Diseases of Bones and Organs of Locomotion (other than Tuberculosis)																				
156. Diseases of Bones—																				
Osteitis	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	9	100	6	109	15
157. Diseases of Joints—																				
Arthritis	—	4	—	4	—	—	2	—	2	—	—	8	—	8	—	15	257	6	272	12
Synovitis	—	4	—	4	—	—	—	—	—	—	—	3	—	3	1	14	170	—	184	9
158. Other Diseases of Bones or Organs of Locomotion ..	—	10	—	10	—	1	11	1	12	—	—	8	—	8	—	29	480	8	509	21
Myalgia	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2	59	—	61	2
XI.—Malformations																				
159. Malformations	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	13	—	13	—
Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Hypospadias	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spina Bifida	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
XII.—Diseases of Infancy																				
160. Congenital Debility	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	51	12	52	1
161. Premature Birth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	8	16	3
162. Other Affections of Infancy ..	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	1	57	19	58	2
Marasmus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55	33	55	1
163. Infant Neglect (Infants of three months or over)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	4	14	—
XIII.—Affections of Old Age																				
164. Senility	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	11	3	12	—
Senile Dementia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	2	13	—
XIV.—Affections Produced by External Causes																				
165. Suicide by Poisoning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
166. Crossive Poisoning (Intentional)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
167. Suicide by Gas Poisoning ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
168. Suicide by Hanging or Strangulation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
169. Suicide by Drowning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Attempted	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of bear	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
XIV.—Affection produced by External Causes—(*Contd.*)																				
170. Suicide by Firearms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
171. Suicide by Cutting or Stabbing Instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
172. Suicide by Jumping from a Height..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
173. Suicide, Attempted	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	5	—	5	—
174. Other Suicides	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
175. Food Poisoning—	—	2	—	2	—	—	7	—	7	—	—	—	—	—	—	—	19	2	19	—
Botulism	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
176. Attacks of Poisonous Animals	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Snake Bite	—	—	—	—	—	—	1	—	1	—	—	1	—	1	—	3	96	2	99	5
Insect Bite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	2	12	2
Human Bite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
177. Other Accidental Poisonings..	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	24	2	24	—
178. Burns (by Fire)	—	—	—	—	—	—	7	—	7	—	—	4	—	4	—	33	406	68	439	35
179. Burns (other than by Fire) ..	—	5	—	5	—	—	—	—	—	—	—	5	—	5	—	6	116	14	122	6
180. Suffocation (Accidental) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
181. Poisoning by Gas (Accidental)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	—
182. Drowning (Accidental) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
183. Wounds (by Firearms, War excepted)	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	5	78	—	83	—
184. Wounds (by Cutting or Stabbing Instruments)	—	1	—	1	—	—	2	—	2	—	—	4	—	4	—	34	699	3	733	7
185. Wounds (by Fall)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	211	17	233	46
186. Wounds (in Mines or Quarries)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—
187. Wounds (by Machinery) ..	—	—	—	—	—	—	—	—	—	—	1	2	—	3	—	3	94	1	97	4
188. Wounds (Crushing, *e.g.*, Railway Accidents, etc.) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	46	1	50	1
189. Injuries Inflicted by Animals, Bites, Kicks, etc.	—	3	—	3	—	—	1	—	1	—	—	—	—	—	—	7	133	5	140	11
190. Wounds Inflicted on Active Service	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
191. Executions of Civilians by Belligerents	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
192. A.—Over Fatigue	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—
B.—Hunger or Thirst ..	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	5	—	5	—
193. Exposure to Cold, Frostbite, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

RETURN OF DISEASES—IN-PATIENTS—(*Contd.*)

DISEASES	European Officials					European General Population (Non-Official)					Non-European Officials (including Asiatics)					Native General Population (including Asiatics)				
	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year	Cases remaining in Hospital from previous year	Total Admission	Total Deaths	Total Cases Treated	Remaining in Hospital at end of year
XIV.—Affection Produced by External Causes—(*Contd.*)																				
194. Exposure to Heat—																				
Heatstroke	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—
Sunstroke	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—
195. Lightning Stroke	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	5	1
196. Electric Shock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	5	—
197. Murder by Firearms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
198. Murder by Cutting or Stabbing Instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
199. Murder by other means	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200. Infanticide (Murder of an Infant under one year)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
201. A.—Dislocation	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	3	59	1	62	2
B.—Sprain	—	6	—	6	—	—	6	—	6	—	—	14	—	14	—	2	104	1	105	5
C.—Fracture	—	7	—	7	—	—	27	2	27	1	—	9	—	9	—	60	748	49	808	58
202. Other External Injuries	1	26	—	27	—	—	35	1	35	2	1	157	—	158	4	72	2,241	15	2,313	86
203. Deaths by Voilence of Unknown Cause	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
XV.—Ill-defined Diseases																				
204. Sudden Death (Cause Unknown)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
205. A.—Diseases not already Specified or Ill-defined	—	5	—	5	—	—	9	—	9	—	—	—	—	—	—	—	38	1	38	1
Ascites	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	44	10	51	3
Œdema	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	4	120	32	124	1
Asthenia	—	4	—	4	—	—	2	—	2	—	1	1	—	2	—	2	62	10	64	4
Shock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	1	3	—
Hyperpyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
P.U.O.	—	5	—	5	—	—	28	—	28	—	1	28	—	29	—	5	85	7	90	4
N.Y.D.	—	13	—	13	—	—	1	—	1	—	—	—	—	—	—	1	59	1	60	10
Debility	—	3	—	3	—	—	1	—	1	—	—	2	—	2	—	7	36	5	43	3
Rift Valley Fever	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Insomnia	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—
Vaccinia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B.—Malingering	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—	7	—
XVI.—Diseases, the Total of which have not Caused Ten Deaths	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	10	—
Grand Total	10	665	4	675	14	28	1,085	25	1,113	17	16	2,232	7	2,248	29	2,115	46,552	2,699	48,667	2,078

TABLE VI.

COLONY AND PROTECTORATE OF KENYA.

RETURN OF DISEASES (Out-Patients)

NUMBERS TREATED DURING THE YEAR 1937

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
I.—Epidemic, Endemic, and Infectious Diseases												
1. Enteric Group—												
(a) Typhoid Fever	2	—	2	—	—	—	2	—	2	7	7	14
(b) Paratyphoid A.	—	—	—	—	—	—	—	—	—	—	—	—
(c) Paratyphoid B.	—	—	—	—	—	—	—	—	—	—	—	—
(d) Type not defined	—	—	—	—	—	—	—	—	—	—	—	—
2. Typhus	—	—	—	—	—	—	—	—	—	—	—	—
3. Relapsing Fever	—	—	—	—	—	—	—	—	—	43	10	53
4. Undulant Fever	—	—	—	—	—	—	—	—	—	—	—	—
5. Malaria—												
(a) Tertian	3	—	3	1	1	2	2	—	2	1,083	230	1,313
(b) Quartan	2	—	2	4	—	4	—	1	1	411	186	597
(c) Aestivo-autumnal	36	4	40	45	42	87	22	—	22	5,161	2,225	7,386
(d) Clinical	53	2	55	37	27	64	509	44	553	18,229	3,500	21,729
Undifferentiated	10	1	11	2	—	2	10	—	10	3,327	1,029	4,356
(e) Cachexia	—	—	—	—	—	—	—	—	—	188	100	288
(f) Blackwater	—	—	—	—	—	—	—	—	—	3	2	5
Cerebral	—	—	—	—	—	—	—	—	—	—	—	—
6. Smallpox	—	—	—	—	—	—	—	—	—	—	—	—
Alastrim	—	—	—	—	—	—	—	—	—	—	—	—
7. Measles	2	—	2	2	1	3	3	—	3	237	88	325
8. Scarlet Fever	—	—	—	—	—	—	1	—	1	—	—	—
9. Whooping Couch	1	—	1	—	—	—	1	—	1	208	212	420
10. Diphtheria	—	—	—	—	—	—	—	—	—	1	4	5
11. Influenza	88	8	96	15	41	56	847	74	921	11,548	1,842	13,390
12. Miliary Fever	—	—	—	—	—	—	—	—	—	—	7	7
13. Mumps	—	—	—	1	—	1	2	—	2	524	129	653
14. Cholera	—	—	—	—	—	—	—	—	—	—	—	—
15. Epidemic Diarrhœa	—	—	—	—	—	—	—	—	—	142	84	226
16. Dysentery	—	—	—	—	—	—	1	—	1	—	—	—
(a) Amœbic	21	2	23	7	12	19	—	—	—	509	304	813
(b) Bacillary	1	1	2	—	1	1	—	—	—	114	8	122
(c) Undefined or due to other causes	2	—	2	5	3	8	34	2	36	687	170	867

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
I.—Epidemic, Endemic, and Infectious Diseases—(*Contd.*)												
17. Plague—												
(*a*) Bubonic	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Pneumlnic	—	—	—	—	—	—	—	—	—	—	—	—
(*c*) Septicæmic	—	—	—	—	—	—	—	—	—	—	—	—
(*d*) Undefined	—	—	—	—	—	—	—	—	—	8	—	8
18. Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
19. Spirochætosis Ictero-hæmorrhagic	—	—	—	—	—	—	—	—	—	—	—	—
20. Leprosy	—	—	—	—	—	—	—	—	—	88	32	120
21. Erysipelas	—	—	—	—	—	—	1	—	1	2	—	2
22. Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—
23. Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—
24. Epidemic Cerebro-spinal Fever ..	—	—	—	—	—	—	—	—	—	4	2	6
25. Other Epidemic Diseases—												
(*a*) Rubeola (German Measles)..	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Varicella (Chicken-pox) ..	—	—	—	—	—	—	—	—	—	416	51	467
(*c*) Kala-azar	—	—	—	—	—	—	—	—	—	—	—	—
(*d*) Phlebotomus Fever	—	—	—	—	—	—	—	—	—	—	—	—
(*e*) Dengue	—	—	—	—	—	—	—	—	—	—	—	—
(*f*) Epidemic Dropsy	—	—	—	—	—	—	—	—	—	182	—	182
(*g*) Yaws	—	—	—	—	—	—	—	—	—	7,082	5,348	12,430
(*h*) Trypanosomiasis	—	—	—	1	—	1	—	—	—	3	—	3
Filariasis	—	—	—	—	—	—	—	—	—	2	—	2
26. Glanders	—	—	—	—	—	—	—	—	—	—	—	—
27. Anthrax	—	—	—	—	—	—	—	—	—	33	16	49
28. Rabies	—	—	—	—	—	—	—	—	—	—	—	—
29. Tetanus	—	—	—	—	—	—	—	—	—	2	1	3
30. Mycosis	—	—	—	—	—	—	—	—	—	11	2	13
31. Tuberculosis, Pulmonary and Laryngeal	1	—	1	1	1	2	1	—	1	221	103	324
32. Tuberculosis of the Meninges or Central Nervous System ..	—	—	—	—	—	—	—	—	—	—	1	1
33. Tuberculosis of the Intestines or Peritoneum	—	—	—	—	—	—	—	—	—	4	3	7
34. Tuberculosis of the Vertebral Column	—	—	—	—	—	—	—	—	—	—	3	3
35. Tuberculosis of Bones and Joints	1	—	1	—	—	—	—	—	—	37	14	51

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
II.—General Diseases not Mentioned Above												
36. Tuberculosis of Other Organs—												
(*a*) Skin or Subcutaneous Tissue (Lupus)	—	—	—	—	—	—	—	—	—	—	1	1
(*b*) Bones	—	—	—	—	—	—	—	—	—	7	1	8
(*c*) Lymphatic System	—	—	—	—	—	—	—	—	—	69	60	129
(*d*) Genito-urinary	—	—	—	—	—	—	—	—	—	—	—	—
(*e*) Other Organs	—	—	—	—	—	—	—	—	—	12	3	15
37. Tuberculosis, Disseminated—												
(*a*) Acute	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Chronic	—	—	—	—	—	—	—	—	—	—	—	—
38. Syphilis—												
(*a*) Primary	—	—	—	2	—	2	—	—	—	937	807	1,744
(*b*) Secondary	—	—	—	—	—	—	—	—	—	756	528	1,284
(*c*) Tertiary	—	—	—	1	—	1	—	—	—	296	173	469
(*d*) Hereditary	—	—	—	—	—	—	—	—	—	77	82	159
(*e*) Period not indicated ..	—	—	—	—	—	—	6	—	6	1,080	445	1,525
39. Soft Chancre	—	—	—	—	—	—	—	—	—	111	7	118
40. A.—Gonorrhœa and its Complications	—	—	—	1	—	1	2	1	3	2,445	381	2,826
B.—Gonorrhœal Ophthalmia ..	—	—	—	—	—	—	—	—	—	11	14	25
C.—Gonorrhœal Arthritis ..	—	—	—	—	—	—	—	—	—	55	25	80
D.—Granulomo Venereum ..	—	—	—	—	—	—	—	—	—	—	—	—
41. Septicæmia	—	—	—	—	—	—	—	—	—	—	—	—
Pyæmia	—	—	—	—	—	—	—	—	—	—	—	—
42. Other Infectious Diseases ..	—	—	—	—	—	—	—	—	—	—	—	—
Trypanosomiasis	—	—	—	—	—	—	—	—	—	—	—	—
43. Cancer or other Malignant Tumours of the Buccal Cavity	—	—	—	—	—	—	—	—	—	—	—	—
44. Cancer or other Malignant Tumours of the Stomach or Liver.. ..	—	—	—	—	—	—	—	—	—	—	1	1
45. Cancer or other Malignant Tumours of the Peritoneum Intestines, Rectum	—	—	—	—	—	—	—	—	—	—	—	—
46. Cancer or other Malignant Tumours of the Female Genital Organs ..	—	—	—	—	—	—	—	—	—	—	—	—
47. Cancer or other Malignant Tumours of the Breast	—	—	—	—	—	—	—	—	—	1	—	1
48. Cancer or other Malignant Tumours of the Skin	—	—	—	—	—	—	—	—	—	2	1	3

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
II.—General Diseases not mentioned above—(*Contd.*)												
49. Cancer or other Malignant Tumours of Organs not Specified	—	—	—	—	—	—	—	—	—	7	5	12
50. Tumours, Non-malignant	2	—	2	5	1	6	3	—	3	152	51	203
51. Acute Rheumatism	27	9	36	2	2	4	145	12	157	2,853	683	3,536
52. Chronic Rheumatism	—	—	—	—	—	—	35	3	38	6,116	2,927	9,043
Rheumatic Fever	—	—	—	—	—	—	—	—	—	—	—	—
53. Scurvy (including Barlow's Disease)	—	—	—	—	—	—	—	—	—	5	2	7
Other Deficiency Diseases	—	—	—	—	—	—	—	—	—	—	—	—
54. Pellagra	—	—	—	—	—	—	—	—	—	—	—	—
55. Beri-beri	—	—	—	—	—	—	—	—	—	—	—	—
56. Rickets	—	—	—	—	1	1	1	—	1	5	6	11
57. Diabetes (not including Insipidus)	5	—	5	1	1	2	—	—	—	13	3	16
58. Anæmia	—	—	—	—	—	—	1	2	3	—	—	—
(*a*) Pernicious	—	—	—	—	—	—	—	—	—	147	11	158
(*b*) Other Anæmias and Chlorosis	3	6	9	1	1	2	13	4	17	587	586	1,173
59. Diseases of the Pituitary Body	—	—	—	1	1	2	—	—	—	1	—	1
60. Diseases of the Thyroid Gland	—	—	—	—	—	—	—	—	—	2	—	2
(*a*) Exophthalmic Goitre	—	—	—	—	1	1	—	—	—	7	27	34
(*b*) Other Diseases of the Thyroid Gland, Myxœdema	—	—	—	—	2	2	—	—	—	5	3	8
61. Diseases of the Para-thyroid Glands	—	—	—	—	—	—	—	—	—	—	—	—
62. Diseases of the Thymus	—	—	—	—	—	—	—	—	—	—	—	—
63. Diseases of the Supra-renal Glands	—	—	—	—	—	—	—	—	—	7	8	15
64. Diseases of the Spleen	—	—	—	—	—	—	10	1	11	476	74	550
65. Leukæmia—												
(*a*) Leukæmia	—	—	—	1	—	1	—	—	—	—	1	1
(*b*) Hodgkin's Disease	—	—	—	—	—	—	—	—	—	2	1	3
Adenitis	—	—	—	—	—	—	—	—	—	1	—	1
66. Alcoholism	—	—	—	—	—	—	—	—	—	2	1	3
67. Chronic Poisoning by Mineral Substances (Lead, Mercury, etc.)	—	—	—	—	—	—	—	—	—	—	—	—
68. Chronic Poisoning by Organic Substances (Morphia, Cocaine, etc.)	—	—	—	—	—	—	—	—	—	—	—	—
69. Other General Diseases	—	—	—	—	—	—	—	—	—	1	—	1
Auto-intoxication	—	—	—	—	—	—	22	2	24	1,020	49	1,069
Purpura Hæmorrhagica	—	—	—	—	—	—	—	—	—	—	—	—
Hæmophilia	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes Insipidus	—	—	—	—	—	—	—	—	—	3	—	3
Obesity	—	—	—	—	1	1	—	—	—	—	—	—

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
III.—Affections of the Nervous System and Organs of the Senses	—	—	—	—	—	—	1	—	1	—	—	—
70. Encephalitis (not including Encephalitis Lethargica)	—	—	—	—	—	—	—	—	—	2	—	2
71. Meningitis (not including Tuberculous Meningitis or Cerebro-psinal Meningitis)	—	—	—	—	—	—	—	—	—	2	1	3
72. Locomotor Ataxia	—	—	—	—	—	—	—	—	—	—	1	1
73. Other Affections of the Spinal Cord	—	—	—	—	—	—	—	—	—	2	—	2
74. Apoplexy—												
(*a*) Hæmorrhage	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Embolism	—	—	—	—	—	—	—	—	—	—	—	—
(*c*) Thrombosis	—	—	—	—	—	—	—	—	—	—	—	—
75. Paralysis—												
(*a*) Hemiplegia	—	—	—	—	—	—	—	—	—	8	1	9
(*b*) Other Paralyses	—	—	—	—	—	—	—	—	—	41	10	51
76. General Paralysis of the Insane ..	—	—	—	—	—	—	—	—	—	—	—	—
77. Other Forms of Mental Alienation	—	—	—	—	—	—	2	—	2	36	13	49
78. Epilepsy	—	—	—	—	—	—	—	—	—	46	17	63
79. Eclampsia Convulsions (Non-puerperal) 5 years or over	—	—	—	—	—	—	1	—	1	—	2	2
80. Infantile Convulsions ,, ..	—	—	—	—	—	—	—	—	—	5	4	9
81. Chorea	—	—	—	—	—	—	—	—	—	1	1	2
82. A.—Hysteria	—	1	1	—	—	—	1	—	1	6	20	26
B.—Neuritis	19	2	21	3	1	4	40	3	43	691	97	788
C.—Neurasthenia	6	1	7	3	5	8	7	3	10	24	7	31
Neuralgia	3	—	3	7	4	11	5	—	5	3,635	1,109	4,744
83. Cerebral Softening..	—	—	—	—	—	—	—	—	—	—	—	—
84. Other Affections of the Nervous System, such as Paralysis Agitans	—	1	1	2	4	6	—	—	—	30	1	31
85. Affections of the Organs of Vision—												
(*a*) Conjunctivitis	14	—	14	6	4	10	129	3	132	8,201	5,666	13,867
(*b*) Trachoma	—	—	—	—	—	—	10	—	10	80	46	126
(*c*) Tumours of the Eye ..	—	—	—	—	—	—	—	1	1	12	1	13
(*d*) Other Affections of the Eye	25	2	27	17	4	21	79	2	81	2,238	949	3,187
86. Affections of the Ear or Mastoid Sinus	46	10	56	34	33	67	96	6	102	4,640	1,964	6,604

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
IV.—Affections of the Circulatory System												
87. Pericarditis	—	—	—	—	—	—	—	—	—	3	1	4
88. Acute Endocarditis or Myocarditis	—	—	—	—	—	—	1	—	1	3	1	4
89. Angina Pectoris	—	—	—	—	—	—	—	—	—	1	—	1
90. Other Diseases of the Heart	—	—	—	—	2	2	—	—	—	47	54	101
(*a*) Valvular	—	—	—	—	—	—	—	—	—	38	3	41
Mitral	3	2	5	—	—	—	4	2	6	44	22	66
Aortic	—	—	—	—	—	—	—	—	—	—	3	3
Tricuspid	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Myocarditis	—	—	—	—	1	1	1	—	1	10	—	10
91. Diseases of the Arteries—												
(*a*) Aneurism	—	—	—	—	—	—	—	—	—	1	—	1
(*b*) Arterio-Sclerosis	—	—	—	—	—	—	—	—	—	1	—	1
(*c*) Other Diseases	—	—	—	—	—	—	—	—	—	—	—	—
92. Embolism or Thrombosis (Non-cerebral)	—	—	—	—	—	—	—	—	—	1	—	1
93. Diseases of the Veins	—	—	—	—	—	—	—	—	—	5	—	5
Hæmorrhoids	5	1	6	3	4	7	8	—	8	77	35	112
Varicose Veins	2	—	2	1	1	2	—	—	—	9	—	9
Phlebitis	—	—	—	—	—	—	—	—	—	7	2	9
94. Diseases of the Lymphatic System	—	—	—	—	—	—	—	—	—	3	—	3
Lymphangitis	3	1	4	2	—	2	5	—	5	14	2	16
Lymphadenitis, Bubo (Non-specific)	1	—	1	3	—	3	—	—	—	543	198	741
95. Hæmorrhage of Undertermined cause	—	—	—	—	1	1	—	1	1	6	4	10
96. Other Affections of the Circulatory System	7	—	7	3	4	7	—	—	—	5	8	13
V.—Affections of the Respiratory System												
97. Diseases of the Nasal Passages	—	—	—	2	1	3	—	—	—	—	—	—
Adenoids	3	—	3	—	1	1	1	—	1	23	10	33
Polypus	—	—	—	1	—	1	—	—	—	17	9	26
Rhinitis	4	—	4	3	—	3	11	—	11	62	6	68
Coryza	47	8	55	8	14	22	226	4	230	12,352	2,877	15,229
98. Affections of the Larynx	—	—	—	1	3	4	—	—	—	—	—	—
Laryngitis	6	—	6	3	1	4	3	5	8	8,117	861	8,978

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
V.—Affections of the Respiratory System.—(*Contd.*)												
99. Bronchitis—												
(*a*) Acute	79	35	114	8	12	20	574	45	619	23,054	9,402	32,456
(*b*) Chronic	1	—	1	—	—	—	105	13	118	11,446	4,032	15,478
100. Broncho-pneumonia	—	—	—	—	—	—	—	—	—	92	341	433
101. Pneumonia—												
(*a*) Lobar	—	—	—	—	—	—	—	—	—	82	28	110
(*b*) Unclassified	2	—	2	—	1	1	8	1	9	431	122	553
102. Pleurisy, Empyema	—	—	—	—	2	2	2	—	2	75	31	106
103. Congestion of the Lungs	—	—	—	—	—	—	—	—	—	7	5	12
104. Gangrene of the Lungs	—	—	—	—	—	—	—	—	—	—	—	—
105. Asthma	3	—	3	4	2	6	45	4	49	608	266	874
106. Pulmonary Emphysema	9	—	1	—	—	—	—	3	3	2	—	2
107. Other Affections of the Lungs	4	—	4	3	4	7	1	1	2	72	92	164
Pulmonary Spirochætosis	—	—	—	—	—	—	—	—	—	—	—	—
Pleurodynia	—	—	—	—	—	—	—	—	—	53	21	74
VI.—Diseases of the Digestive System												
108. A.—Diseases of Teeth or Gums	—	—	—	3	2	5	1	—	1	309	32	341
Caries	14	1	15	13	1	14	86	3	89	7,540	2,891	10,431
Pyorrhœa	4	—	4	1	2	3	18	1	19	258	120	378
B.—Other Affections of the Mouth	1	—	1	1	1	2	2	—	2	2	1	3
Stomatitis	1	—	1	3	1	4	29	1	30	509	298	807
Glossitis, etc.	—	—	—	—	—	—	—	1	1	18	7	25
109. Affections of the Pharynx or Tonsils	—	—	—	—	—	—	—	—	—	—	—	—
Tonsillitis	31	4	35	13	17	30	64	5	69	2,159	840	2,999
Pharyngitis	41	10	51	5	4	9	253	7	260	2,375	323	2,698
110. Affections of the œsophagus	—	—	—	1	—	1	—	—	—	17	—	17
111. A.—Ulcer of the Stomach	—	—	—	—	—	—	—	—	—	5	2	7
B.—Ulcer of the Duodenum	—	—	—	—	—	—	—	—	—	—	—	—
112. Other Affections of the Stomach	—	—	—	—	—	—	1	—	1	11	1	12
Gastritis	28	8	36	5	7	12	21	3	24	1,032	550	1,582
Dyspepsia	49	19	68	18	22	40	106	9	115	3,693	2,052	5,745
113. Diarrhœa and Enteritis—												
Under two years	—	—	—	11	13	24	7	1	8	1,624	1,669	3,293
114. Diarrhœa and Enteritis—												
Two years and over	37	9	46	11	16	27	121	1	122	2,616	863	3,479
Colitis	11	—	11	1	2	3	39	5	44	898	168	1,066
Ulceration	—	—	—	—	1	1	—	—	—	10	9	19
114A. Sprue	—	—	—	—	—	—	—	—	—	1	—	1

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
VI.—Diseases of the Digestive System.—(*Contd.*)												
115. Ankylostomiasis	1	—	1	—	—	—	1	—	1	1,228	257	1,485
116. Diseases due to Intestinal Parasites	—	—	—	—	—	—	—	—	—	9	—	9
(*a*) Cestoda (Tænia)	2	—	2	—	—	—	8	1	9	40,128	6,430	46,558
(*b*) Trematoda (Flukes)	—	—	—	—	—	—	—	—	—	—	3	3
(*c*) Nematoda (other than Ankylostoma)	—	—	—	—	—	—	—	—	—	15	3	18
Ascaris	—	—	1	—	1	1	15	2	17	4,377	4,253	8,630
Trichocephalus dispar.	—	1	—	—	—	—	—	—	—	88	39	127
Trichina	—	—	—	—	—	—	—	—	—	55	12	67
Dracunculus	—	—	—	—	—	—	—	—	—	6	—	6
Strongylus	—	—	—	—	—	—	—	—	—	26	1	27
Oxyuris	—	—	—	—	1	1	—	—	—	37	28	65
(*d*) Coccidia	—	—	—	—	—	—	—	—	—	—	—	—
(*e*) Other Parasites	—	—	—	—	—	—	—	—	—	925	210	1,135
(*f*) Unclassified	—	—	—	—	—	—	—	—	—	261	20	281
117. Appendicitis	12	—	13	4	6	10	4	—	4	10	1	11
118. Hernia	3	1	3	1	1	2	1	—	1	195	6	201
119. A.—Affections of the Anus	—	—	—	—	—	—	—	—	—	—	5	5
Fistula, etc.	—	—	—	1	—	1	3	—	3	21	3	24
B.—Other Affections of the Intestines	—	—	—	—	—	—	—	—	—	10	2	12
Enteroptosis	—	—	—	—	—	—	—	—	—	—	—	—
Constipation	63	—	67	7	8	15	434	53	487	19,172	9,041	28,213
120. Acute Yellow Atrophy of the Liver		4										
121. Hydatid of the Liver	—		—	—	—	—	—	—	—	—	—	—
122. Cirrhosis of the Liver—		—										
(*a*) Aocoholic	—		—	—	—	—	—	—	—	—	—	—
(*b*) Other Forms	—	—	—	—	—	—	—	—	—	4	1	5
123. Biliary Calculus	—	—	—	—	—	—	—	—	—	—	—	—
124. Other Affections of the Liver—		—										
Abscess	—		—	—	1	1	—	—	—	4	—	4
Hepatitis	2	—	3	1	—	1	8	1	9	191	57	248
Cholecystitis	1	1	1	—	2	2	—	—	—	1	4	5
Jaundice	2	—	2	—	—	—	2	—	2	34	2	36
125. Diseases of the Pancreas	—	—	—	—	—	—	—	—	—	—	—	—
126. Peritonitis (of Unknown Cause)	—	—	1	—	—	—	—	—	—	—	1	1
127. Other Affections of the Digestive System	8	1	8	5	10	15	4	—	4	624	235	859
Colic	1	—	1	—	2	2	2	—	2	250	109	359
		—										

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
VII.—Diseases of the Genito-urinary System (Non-venereal)												
128. Acute Nephritis	—	—	—	—	—	—	1	—	1	25	17	42
129. Chronic Nephritis	—	—	—	—	—	—	4	1	5	12	16	28
130. A.—Chyluria	—	—	—	—	—	—	—	—	—	16	1	17
B.—Schistosomiasis	—	2	2	—	—	—	—	—	—	478	47	525
131. Other Affections of the Kidneys	—	—	—	1	3	4	—	—	—	5	6	11
Pyelitis	5	1	6	1	1	2	—	—	—	18	14	32
132. Urinary Calculus	1	—	1	—	—	—	2	—	2	2	—	2
133. Diseases of the Bladder	—	—	—	—	—	—	—	—	—	—	—	—
Cystitis	5	5	10	5	5	10	17	—	17	116	32	148
134. Diseases of the Urethra—												
(*a*) Stricture	—	—	—	—	—	—	—	—	—	31	—	31
(*b*) Other	—	—	—	6	—	6	—	—	—	63	16	79
135. Diseases of the Prostate—												
Hypertrophy	—	—	—	—	—	—	—	—	—	—	—	—
Prostatitis	—	—	—	1	—	1	—	—	—	4	—	4
136. Diseases (Non-venereal) of the Genital Organs of Man ..	—	—	—	4	—	4	—	—	—	149	—	149
Epididymitis	—	—	—	1	1	2	—	—	—	18	—	18
Orchitis	4	—	4	2	—	2	—	—	—	330	—	330
Hydrocele	—	—	—	2	2	4	2	—	2	207	—	207
Ulcer of Penis	—	—	—	—	—	—	—	—	—	64	—	64
137. Cysts or other Non-malignant Tumours of the Ovaries.. ..	—	3	3	—	—	—	—	—	—	—	11	11
138. Salpingitis	—	—	—	—	—	—	—	—	—	—	7	7
Abscess of the Pelvis	—	—	—	—	—	—	—	—	—	4	18	22
139. Uterine Tumours (Non-malignant)	—	—	—	—	—	—	—	—	—	—	10	10
140. Uterine Hæmorrhage (Non-puerperal)	—	—	—	—	1	1	—	—	—	—	19	19
141. A.—Metritis	—	—	—	—	3	3	—	—	—	—	51	51
B.—Othr Affections of the Female Genital Organs	—	—	—	—	16	16	—	1	1	—	25	25
Displacement of Uterus ..	—	—	—	—	2	2	—	—	—	—	4	4
Amenorrhœa	—	6	6	—	4	4	—	7	7	—	133	133
Dysmenorrhœa	—	1	1	—	9	9	—	15	15	—	218	218
Leucorrhœa	—	—	—	—	4	4	—	1	1	—	77	77
142. Diseases of the Breast (Non-puerperal)	—	—	—	—	—	—	—	—	—	—	1	1
Mastitis	—	—	—	1	7	8	—	1	1	3	221	224
Abscess of Breast	—	—	—	—	—	—	—	—	—	8	38	46

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
VIII.—Puerperal State	—	—	—	—	—	—	—	13	13	—	—	—
143. A.—Normal Labour	—	1	1	—	—	—	—	—	—	—	294	294
B.—Accidents of Pregnancy—												
(*a*) Abortion	—	—	—	—	1	1	—	4	4	—	129	129
(*b*) Ectopic Gestation ..	—	—	—	—	—	—	—	—	—	—	—	—
(*c*) Other Accidents of Pregnancy	—	—	—	—	2	2	—	1	1	—	83	83
144. Puerperal Hæmorrhage	—	—	—	—	—	—	—	—	—	—	1	1
145. Other Accidents of Parturition ..	—	—	—	—	—	—	—	—	—	—	12	12
146. Puerperal Septicæmia	—	—	—	—	—	—	—	—	—	—	9	9
147. Phlegmasis Dolens	—	—	—	—	—	—	—	—	—	—	1	1
148. Puerperal Eclampsia	—	—	—	—	—	—	—	—	—	—	—	—
149. Sequelæ of Labour	—	—	—	—	—	—	—	—	—	—	40	40
150. Puerperal Affections of the Breast	—	—	—	—	—	—	—	—	—	—	1	1
IX.—Affections of the Skin and Cellular Tissues												
151. Gangrene	—	—	—	—	—	—	—	—	—	17	—	17
152. Boil	34	9	43	11	3	14	162	4	166	1,900	403	2,303
Carbuncle	3	—	3	9	3	12	—	—	—	9	1	10
153. Abscess	9	1	10	11	6	17	28	—	28	1,668	518	2,186
Whitlow	2	1	3	1	2	3	1	1	2	352	90	442
Cellulitis	18	5	23	3	2	5	16	2	18	2,627	514	3,141
154. A.—Tinea	—	—	—	3	2	5	6	—	6	549	171	720
B.—Scabies	8	—	8	—	—	—	19	—	19	10,863	4,663	15,526
155. Other Diseases of the Skin ..	28	—	28	31	28	59	20	—	20	943	344	1,287
Erythema	—	—	—	—	—	—	2	—	2	75	21	96
Urticaria	11	3	14	2	5	7	34	6	40	518	203	721
Eczema	14	1	15	1	1	2	90	7	97	1,015	252	1,267
Herpes	2	—	2	3	—	3	14	1	15	135	25	160
Psoriasis	—	—	—	—	—	—	6	1	7	46	17	63
Elephantiasis	—	—	—	—	—	—	—	—	—	162	127	289
Myiasis	—	—	—	—	—	—	—	—	—	—	52	52
Chigoes	6	3	9	—	2	2	1	—	1	2,983	1,472	4,455
Cutaneous Leishmaniasis ..	—	—	—	—	—	—	—	—	—	58	23	81
Ulcers	4	—	4	2	6	8	86	11	97	24,209	7,877	32,086

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
X.—Diseases of Bones and Organs of Locomotion (other than Tuberculosis)												
156. Diseases of Bones	—	—	—	1	—	1	—	—	—	—	—	—
Osteitis	—	—	—	—	—	—	2	—	2	152	40	192
157. Diseases of Joints—												
Arthritis	6	1	7	3	1	4	2	—	2	662	191	853
Synovitis	11	3	14	—	—	—	6	1	7	606	132	738
158. Other Diseases of Bones or Organs of Locomotion	9	—	9	2	4	6	17	—	17	2,848	434	3,282
Myalgia	9	—	9	2	3	5	42	—	42	4,003	1,000	5,003
XI.—Malformations												
159. Malformations	—	—	—	2	—	2	—	—	—	1	—	1
Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—
Hypospadias	—	—	—	—	—	—	—	—	—	—	—	—
Spina Bifida	1	—	1	—	—	—	1	—	1	—	—	—
XII.—Diseases of Infancy												
160. Congenital Debility	—	—	—	—	—	—	—	—	—	70	73	143
161. Premature Birth	—	—	—	—	—	—	—	—	—	1	3	4
162. Other Affections of Infancy ..	—	—	—	—	—	—	—	—	—	14	24	38
Marasmus	—	—	—	—	—	—	—	—	—	3	5	8
163. Infant Neglect (Infants of three months or over)	—	—	—	—	—	—	—	—	—	—	4	4
XIII.—Affections of Lld Age												
164. Senility	1	—	1	—	—	—	—	—	—	7	5	12
Senile Dementia	—	—	—	1	—	1	—	—	—	42	—	42
XIV.—Affections Produced by External Causes												
165. Suicide by Poisoning	—	—	—	—	—	—	—	—	—	—	—	—
166. Corrosive Poisoning (Intentional)	—	—	—	—	—	—	—	—	—	—	—	—
167. Suicide by Gas Poisoning ..	—	—	—	—	—	—	—	—	—	—	—	—
168. Suicide by Hanging or Strangulation	—	—	—	—	—	—	—	—	—	—	—	—

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
XIV.—Affections Produced by External Causes.—(*Contd.*)												
169. Suicide by Drowning	—	—	—	—	—	—	—	—	—	—	—	—
170. Suicide by Firearms	—	—	—	—	—	—	—	—	—	—	—	—
171. Suicide by Cutting or Stabbing Instruments	—	—	—	—	—	—	—	—	—	—	—	—
172. Suicide by Jumping from a Height	—	—	—	—	—	—	—	—	—	—	—	—
173. Suicide by Crushing	—	—	—	—	—	—	—	—	—	—	—	—
174. Other Suicides	—	—	—	—	—	—	—	—	—	—	—	—
175. Food Poisoning	2	1	3	—	—	—	2	—	2	18	9	27
Botulism	—	—	—	2	—	2	—	—	—	1	—	1
176. Attacks of Poisonous Animals—												
Snake Bite	—	—	—	—	—	—	1	—	1	56	11	67
Insect Bite	14	1	15	8	6	14	4	—	4	145	29	174
177. Other Accidental Poisonings	—	—	—	—	—	—	—	—	—	3	1	4
178. Burns (by Fire)	15	—	15	2	—	2	38	6	44	1,534	874	2,408
179. Burns (other than by Fire)	7	3	10	1	—	1	13	1	14	1,126	167	1,293
180. Suffocation (Accidental)	—	—	—	—	—	—	—	—	—	—	—	—
181. Poisoning by Gas (Accidental)	—	—	—	—	—	—	—	—	—	—	—	—
182. Drowning (Accidental)	—	—	—	—	—	—	—	—	—	—	—	—
183. Wounds (by Firearms, War excepted)	1	—	1	1	—	1	1	—	1	137	—	137
184. Wounds (by Cutting or Stabbing Instruments)	1	—	1	1	—	1	18	1	19	4,373	733	5,106
185. Wounds (by Fall)	2	—	2	—	1	1	1	—	1	1,535	192	1,727
186. Wounds (in Mines or Quarries)	—	—	—	—	—	—	—	—	—	1	—	1
187. Wounds (by Machinery)	—	—	—	1	—	1	2	—	2	45	7	52
188. Wounds (Crushing, *e.g.*, Railway Accidents, etc.)	—	—	—	—	1	1	—	—	—	25	—	25
189. Injuries Inflicted by Animals, Bites, Kicks, etc.	2	1	3	1	2	3	1	—	1	325	75	400
190. Wounds Inflicted on Active Service	—	—	—	—	—	—	—	—	—	—	—	—
191. Executions of Civilians by Belligerents	—	—	—	—	—	—	—	—	—	—	—	—
192. A.—Over Fatigue	—	—	—	—	—	—	—	—	—	—	—	—
B.—Hunger or Thirst	—	—	—	—	—	—	—	—	—	—	—	—
193. Exposure to Cold, Frostbite, etc.	—	—	—	—	—	—	—	—	—	1	—	1
194. Exposure to Heat—												
Heatstroke	—	—	—	1	—	1	—	—	—	1	—	1
Sunstroke	1	—	1	5	—	5	—	—	—	—	—	—
195. Lightning Stroke	—	—	—	—	—	—	—	—	—	—	—	—
196. Electric Shock	—	—	—	—	—	—	1	—	1	2	—	2

RETURN OF DISEASES—OUT-PATIENTS—(*Contd.*)

DISEASES	European Officials			European General Population (Non-Official)			Non-European Officials (including Asiatics)			Native General Population (including Asiatics)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
XIV.—Affections Produced by External Causes.—(*Contd.*)												
197. Murder by Firearms	—	—	—	—	—	—	—	—	—	—	—	—
Instruments	—	—	—	—	—	—	—	—	—	—	—	—
199. Murder by other means	—	—	—	—	—	—	—	—	—	—	—	—
200. Infanticide (Murder of an Infant under one year)	—	—	—	—	—	—	—	—	—	—	—	—
201. A.—Dislocation	1	—	1	2	—	2	—	—	—	47	23	70
B.—Sprain	20	2	22	1	2	3	23	—	23	2,800	550	3,350
C.—Fracture	6	—	6	7	—	7	53	—	53	234	38	272
202. Other External Injuries	174	23	197	33	18	51	777	16	793	39,804	3,839	43,643
203. Deaths by Violence of Unknown Cause	—	—	—	—	—	—	—	—	—	—	—	—
XV.—Ill-defined Diseases												
204. Sudden Death (Cause Unknown)	—	—	—	—	—	—	—	—	—	—	—	—
205. A.—Diseases not already specified or ill-defined	—	—	—	1	—	1	—	—	—	116	178	294
Ascites	—	—	—	—	—	—	1	—	1	32	17	49
Œdema	—	—	—	1	—	1	2	—	2	144	76	220
Asthenia	1	—	1	4	2	6	1	—	1	312	54	366
Shock	—	—	—	—	—	—	—	—	—	—	—	—
Hyperpyrexia	—	—	—	—	—	—	—	—	—	2	8	10
P.U.O.	47	17	64	7	4	11	201	24	225	3,826	867	4,693
N.Y.D.	2	—	2	—	—	—	—	—	—	7	1	8
Debility	39	7	46	14	28	42	50	17	67	54	20	74
Vaccinia	—	—	—	—	—	—	—	—	—	11	2	13
B.—Malingering	—	—	—	—	—	—	—	—	—	11	—	11
XVI.—Diseases, the Total of Which Have not Caused Ten Deaths ..	—	—	—	—	—	—	—	—	—	—	—	—
Grand Total ..	1,382	257	1,639	563	563	1,126	6,041	480	6,521	350,366	109,582	459,948

MEDICAL RESEARCH LABORATORY
ANNUAL REPORT 1937

By
F. W. VINT, M.D., B.Ch., B.A.O., (Q.U., Belfast), B.Sc.,
Senior Pathologist

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MEDICAL RESEARCH ANNUAL REPORT

Page 3 .. Second table, Asians: *for* 606 *read* 607.

Page 8 .. Re-Vaccinations, "Successful" column—against Wesu: *delete* figure 5.

Total of "Failed" column: *for* 563 *read* 583.

Page 12 .. Paragraph 6, Research: *for* meningities *read* meningitis.

Page 13 .. First table—"European" column: *for* 22 *read* 12.

Page 14 .. After first sentence: *insert* (*a*) *Urine*—.

Under sub-section (*d*): *for* Fractional tests *read* Fractional test meals.

Page 16 .. Section 6, sub-paragraph (*b*), last sentence: *for* Local Native Council *read* Administration.

Annual Report of the Medical Research Laboratory, Colony and Protectorate of Kenya 1937

STAFF, 1937

Senior Pathologist.—F. W. Vint, M.D., B.Ch., B.A.O. (Q.U. Belfast), B.Sc.

Assistant Pathologists.—R. M. Dowdeswell, M.A., B.Ch. (Cantab.), M.R.C.S. (Eng.), L.R.C.P. (Lond.); G. L. Timms, M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.B., B.S., (Lond.).

Biochemist.—D. Harvey, M.A., B.Sc., Ph.D.

Medical Entomologist.—J. I. Roberts, D.Sc. (seconded from Entomological Section, 4th September, 1937).

Laboratory Superintendent.—F. A. Bailey.

Laboratory Assistants, Senior Grade.—H. M. Nefdt, B.Sc., W. L. Titman, A. H. Daws, W. A. Doust, E. C. Young, T. G. R. Jones.

Laboratory Assistants (Asiatic).—Ramji Dass, J. St. A. M. d'Souza.

Librarian and Stenographer.—Miss A. M. Collins.

Storekeeper.—M. de Souza.

From January until the middle of August the senior laboratory staff consisted of three Medical Officers and a Biochemist. In August, owing to Dr. Dowdeswell's departure on overseas leave, some addition to the staff became imperative and Dr. Roberts was seconded from the Entomological Section to take over the protozoological work of the laboratory. In September Dr. Harvey proceeded on leave and Mr. Nefdt took over the duties of Biochemist but it has not been possible to provide a laboratory assistant to replace Mr. Nefdt. The shortage of staff is shown in the Kisumu laboratory being staffed only by African assistants. This is a matter for regret as the volume of work there has increased so enormously of recent years that the provision of European supervision is essential and must be faced in the near future.

Below is set out the staff today as compared with that at the end of 1932, at which time owing to the financial depression it was considered that the laboratory staff had been reduced to the minimum numbers consistent with efficiency:

	1932	1937
Medical Officers	5	3
Biochemist	1	1
Protozoologist		1
Laboratory Superintendent	1	1
Laboratory Assistants: European	7	6
Laboratory Assistants: Asiatic	2	2
Total ...	16	14

In spite of this 12½ per cent reduction in the staff the amount of routine diagnostic work and the manufacture of laboratory products have shown a very marked increase since 1932:—

Year	Staff	Number of Specimens Examined	Number of c.cs. Vaccine Bismuth, etc.	Value of Laboratory Products	Fees collected in Cash
1932	16	33,397	719,083	£33,055	£812
1937	14	58,329	1,391,575	£52,266	£2,302

In estimating the value of laboratory products the prices given in the 1932 Annual Report have been used to obtain comparable figures. Actually these figures are too high for current prices and estimated on present-day prices the value is £41,774. No account is taken of freight or other charges in these figures which may be estimated at approximately 20 per cent of the total.

This increase in work has been rendered possible by three factors:—

1. During 1937 there was very little absence on leave of laboratory assistants.

2. The increased technical ability and reliability of the African staff which is improving year by year. To-day the standard is high and it is now found that the best of the African can be recruited for the laboratory service.

3. The increase in routine diagnostic work and the preparation of laboratory products occupy the full time of the laboratory staff to the detriment of research work. In a laboratory of this nature research work must necessarily be subordinated to routine work.

The Annual Report of the Entomological Section is not included in this Report as in previous years but will be found in the Addendum. The Entomological Section is no longer a part of the Laboratory but is now under the administration of Medical Headquarters.

A—SECTION OF MEDICAL BIOLOGY

1—Staff

(*a*) *European.*—Dr. G. L. Timms was in charge of the section until the 6th September, 1937, when Dr. J. I. Roberts took over charge. Mr. E. C. Young was Senior Laboratory Assistant.

(*b*) *African.*—The native staff varies from time to time, except for one or two of the Senior African Laboratory Assistants who help with the training of the juniors.

2—Specimens

During the year 28,236 specimens were examined in this section, an increase of 390 over the previous year. They are tabulated below:—

(*a*) *Fæces Examinations*

The number of specimens examined was 10,426, including 603 from the Nairobi Prison (part of a survey, the results of which are not included in the table below). A further 336 specimens are included which were examined at the Infectious Diseases Hospital.

E. histolytica has dropped in numbers this year, being 440 as compared with 618 in 1936.

Among the stools examined, one had six ova and one protozoa; another five ova and two protozoa and one other four ova and four protozoa.

As usual the table is made out to show the numbers of times the individual organisms were encountered, no account being taken of whether or not several varieties were present in the same specimen.

	Europeans	Asians	Africans	Total
Ova of—				
Taenia	9	11	1,816	1,836
A. lumbricoides	8	19	1,214	1,241
A. duodenale	24	22	1,082	1,128
S. stercoralis	—	7	76	83
S. mansoni	23	5	138	166
E. vermicularis	4	3	73	80
T. trichura	38	34	714	786
H. nana	—	4	36	40
S. stercoralis (Larvæ of)	9	7	254	270
Cysts and other forms of—				
E. coli	180	73	2,196	2,449
E. histolytica	133	18	289	440
E. histolytica ?	5	—	12	17
I. butschlii	18	15	287	320
G. intestinalis	56	21	205	282
C. mesnili	90	18	246	354
I. hominis	1	—	6	7
Unidentified flagellate cysts	87	32	653	772
E. histolytica and *C. mesnili*	18	5	56	79
Balantidium coli	1	—	—	1
Charcot-Leyden crystals (no cysts) ..	46	11	48	105
Negative	1,909	427	2,748	5,084
TOTAL NUMBERS EXAMINED ..	2,459	625	6,739	9,823

Included in the above table is the number of times *C. mesnili* has been found with *E. histolytica*—amounting to about 20 per cent of the cases. This figure has been constant for the past three years.

(*b*) *Blood Examinations*

The total number of specimens examined was 16,905, including 65 examined at the Infectious Diseases Hospital. The table below does not include 770 examinations carried out for different surveys in the Colony.

The following examinations and findings were made:—

	Europeans	Asians	Africans	Total
P. falciparum	206	606	1,452	2,265
P. vivax	23	42	53	118
P. malaria	6	8	35	49
P. ovale	—	1	—	1
P. falciparum (crescents) ..	9	40	230	279
Mixed infections	6	8	26	40
Trypanosomos	—	—	1	1
Filaria, sheathed	—	3	3	6
Filaria, unsheathed	—	—	48	48
Differential counts	377	54	45	476
Total counts	291	7	25	323
Negative for malaria counts ..	1,414	2,861	8,206	12,481
TOTAL ..	2,332	3,631	10,124	16,087

There was no big rise in malaria although the total was up by nearly 500. There has been a big rise in the crescent rate, with 279 for 1937 as compared with 98 in 1936. It is of interest to note that all races rose proportionately.

The number of *S. rossi* cases has been rising steadily for the last four years.

(*c*) *Miscellaneous Examinations*

37 cerebro-spinal fluids for cell count were received.

104 specimens of blood were examined to ascertain the group.

36 specimens of urine were examined for the presence of *S. hæmotobium* and 12 were found positive.

2 sputa were examined for the presence of liver cells, amœbæ or Charcot-Leyden crystals and were found negative to all.

1 cerebro-spinal fluid was examined for the presence of trypanosomes and found negative.

3 spleen smears and 2 liver smears were examined for the presence of Leishman Donovan bodies and found negative.

(d) Other Work

Owing to the pressure of routine work (about 100 examinations per working diem) research work has been in abeyance.

B—CALF LYMPH SECTION

During the year considerable difficulty was experienced in obtaining calves and towards the latter part of the year the price for hire increased. Even then the majority of the animals obtainable were males, a considerable number of which were unsuitable owing to age, etc., but had to be used.

The decrease in the number of calves received in 1937 is mainly due to the smaller demand for lymph by the Government of Uganda.

Production of Calf Lymph in 1937

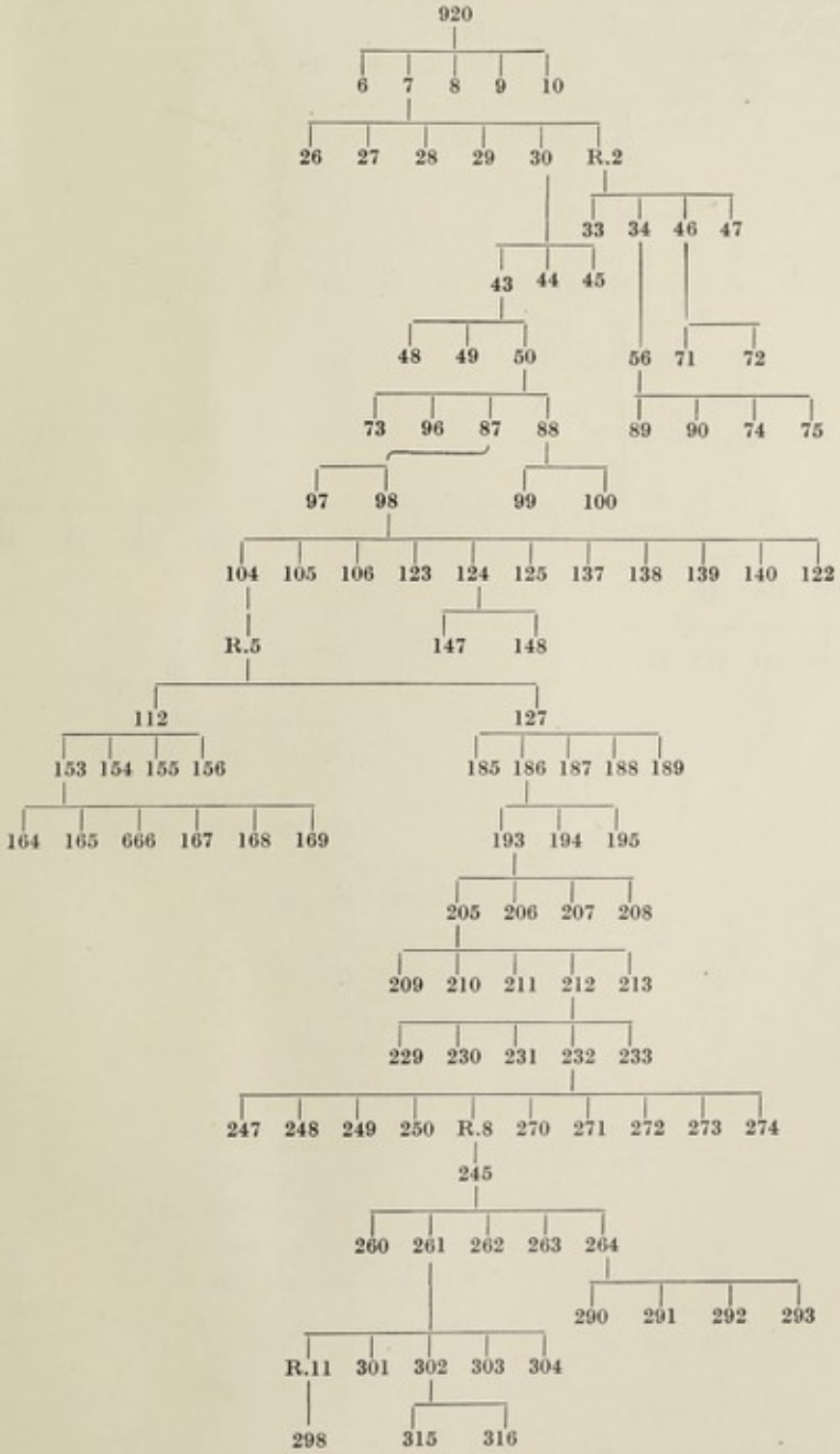
Total number of calves—	
Received	317
From which lymph was collected	255
Rejected as being scabby, failed and died ...	62
Total number of grammes of pulp collected	2,513.95
Average yield per calf (in grammes)	9.86
Total number of doses—	
Remaining on hand on 31-12-36	453,535
Manufactured in 1937	754,185
Issued in 1937	852,500
Discarded	37,480
Remaining in hand on 31-12-37	317,740

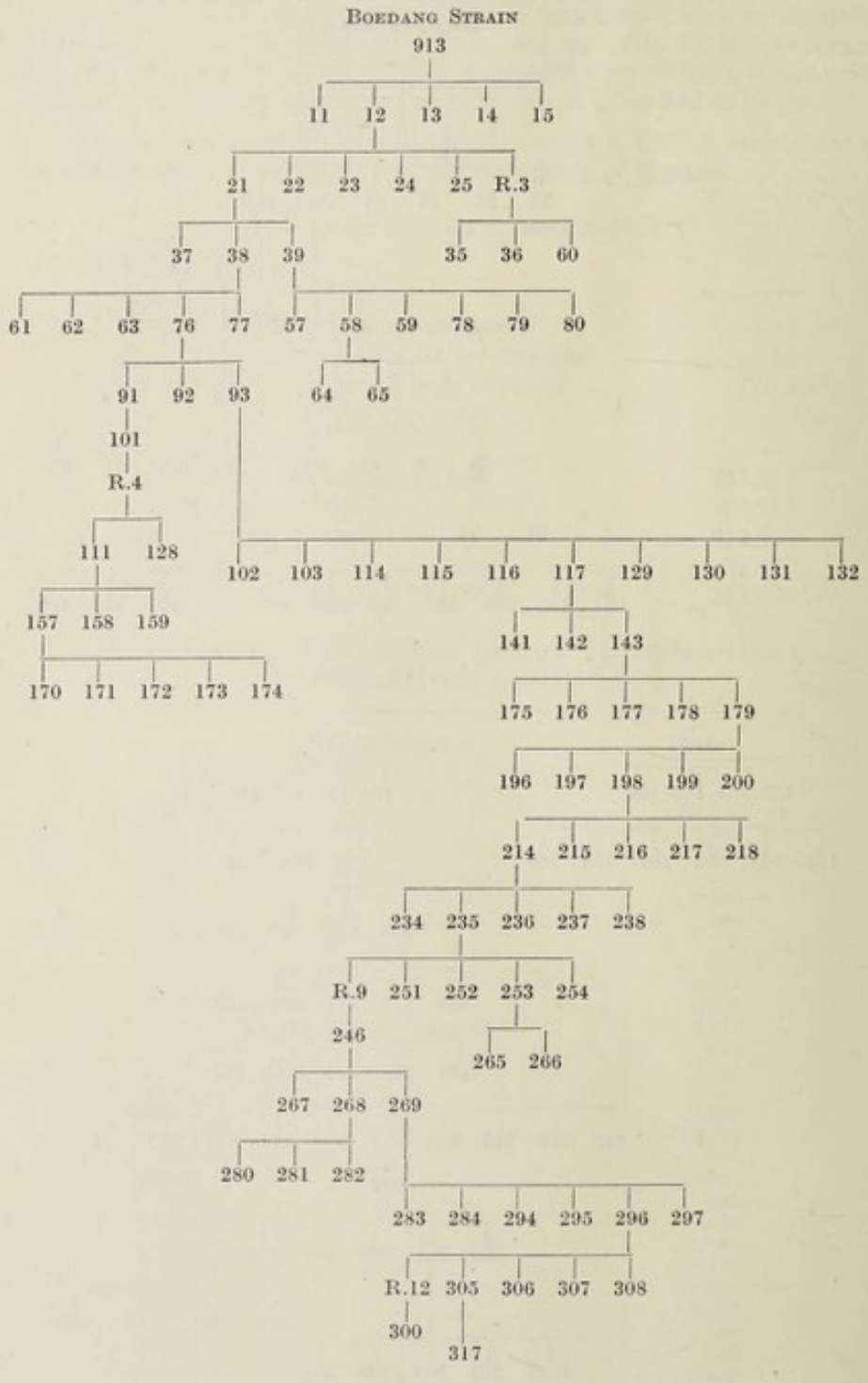
List of Stations with Amount of Calf Lymph Supplied to each Station in 1937

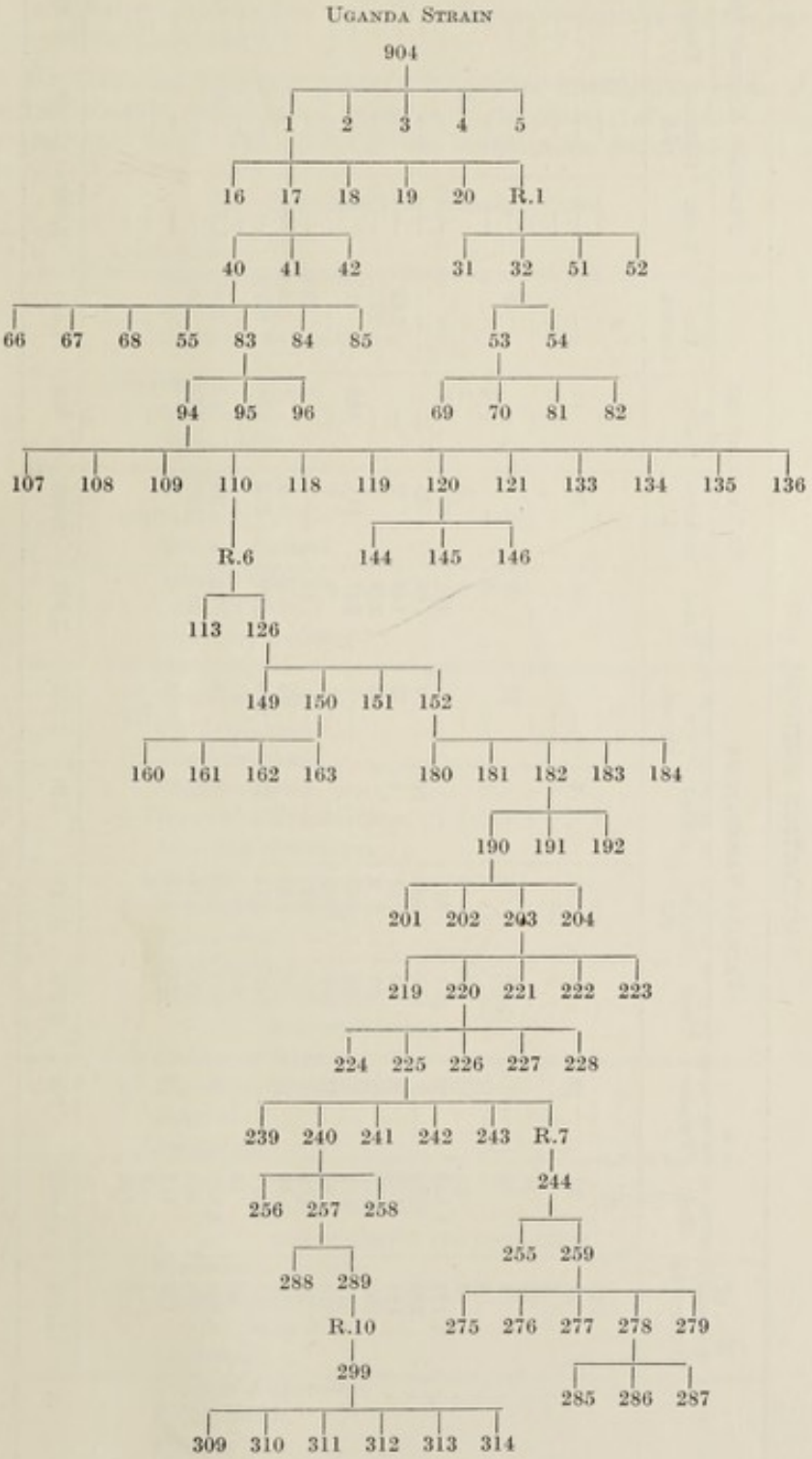
Stations	Doses
Mombasa	23,300
Lamu	540
Voi	1,700
Wesu	540
Kilifi	220
Kitui	220
Machakos	9
Magadi	200
Prison Hospital, Nairobi	1,549
Miscellaneous	1,366
Medical Officer of Health, Nairobi	2,112
Fort Hall	344
Nyeri	393
Meru	1,140
Isiolo	2,950
Marsabit	29,315
Nakuru	1,706
Moyale	11,000
Eldoret	624
Kitale	520
Tambach	1,060
Kapsabet	118
Kisumu	4,600
Kakamega	3,375
Kisii	268
Kericho	659
Loitokitok	5,000
Lodwar	6,000
Lokitaung	4,146
Total ..	104,974
Uganda	747,526
Grand Total ..	852,500

Tables Showing the History of Each Strain, 1937

Belgaum Strain




Boedang Strain
913
11 12 13 14 15
21 22 23 24 25 R.3
37 38 39 35 36 60
61 62 63 76 77 57 58 59 78 79 80
91 92 93 64 65
101
R.4
111 128
102 103 114 115 116 117 129 130 131 132
157 158 159
141 142 143
170 171 172 173 174
175 176 177 178 179
196 197 198 199 200
214 215 216 217 218
234 235 236 237 238
R.9 251 252 253 254
246
265 266
267 268 269
280 281 282
283 284 294 295 296 297
R.12 305 306 307 308
300
317


Uganda Strain
904
1 2 3 4 5
16 17 18 19 20 R.1
40 41 42 31 32 51 52
66 67 68 55 83 84 85 53 54
94 95 96 69 70 81 82
107 108 109 110 118 119 120 121 133 134 135 136
R.6 144 145 146
113 126
149 150 151 152
160 161 162 163 180 181 182 183 184
190 191 192
201 202 203 204
219 220 221 222 223
224 225 226 227 228
239 240 241 242 243 R.7
244
256 257 258
255 259
288 289
275 276 277 278 279
R.10
299
285 286 287
309 310 311 312 313 314

VACCINATION RETURNS, 1937

Residence	No. of Persons Vaccinated	Sex		Primary Vaccinations				Re-Vaccinations				Previous History Unknown			
		Male	Female	Total	Successful	Failed	Unknown	Total	Successful	Failed	Unknown	Total	Successful	Failed	Unknown
Lamu	285	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kilifi	81	71	15	23	21	2	—	58	39	19	—	—	—	—	—
Malindi	3	3	—	3	—	3	—	—	—	—	—	—	—	—	—
Voi	25	25	—	—	—	—	—	—	—	—	—	—	—	—	—
Kitui	58	55	—	39	6	—	33	19	—	—	19	—	—	—	—
Machakos	5	4	1	—	1	1	—	4	—	4	—	—	—	—	—
Wesu	65	51	14	3	3	—	—	1	5	1	—	2	1	1	—
Nairobi Prison	1,488	1,480	8	511	511	—	—	977	827	150	—	—	—	—	—
Miscellaneous	234	234	—	174	146	21	7	60	60	—	—	—	—	—	—
Fort Hall	181	173	8	37	11	1	35	149	2	—	142	—	—	—	—
Nyeri	290	279	11	67	4	—	63	223	2	—	221	—	—	—	—
Meru	514	504	10	43	43	—	—	447	214	186	47	24	—	—	24
Eldoret	118	83	35	109	109	—	—	9	9	—	—	—	—	—	—
Kitale	175	168	7	161	161	—	—	14	—	2	12	—	—	—	—
Tambach	102	91	11	93	59	—	34	9	2	1	6	—	—	—	—
Kakamega	2,531	2,531	—	1,362	261	127	974	1,169	212	130	827	—	—	—	—
Kisii	35	35	—	35	—	—	35	—	—	—	—	—	—	—	—
Kisumu	4,964	4,924	40	197	107	3	74	272	38	65	169	3,577	48	14	3,515
Kericho	508	508	—	195	176	19	—	213	140	25	48	—	—	—	—
Kapsabet	126	111	15	123	118	3	2	3	3	—	—	—	—	—	—
Narok	3	3	—	3	3	—	—	—	—	—	—	—	—	—	—
Moyale	1,222	636	586	—	—	—	—	—	—	—	—	—	—	—	—
Total ..	13,013	11,969	761	3,203	1,740	180	1,257	3,627	1,548	563	1,491	3,603	49	15	3,539

C—SECTION OF PATHOLOGY

1—Staff

During the year this section was under the charge of Dr. F. W. Vint with Mr. A. H. Daws as Laboratory Assistant.

In addition to the routine work Dr. Vint was responsible for the administration of the Laboratory.

Mr. Daws has been engaged on a helminthic investigation in the Prison Hospital, Nairobi, with special reference to the efficacy of various drugs on intestinal helminths. The results of this investigation should soon be available.

2—Post-mortem Examinations

European—	
Accident and suicide	4
Myocarditis	1
Cerebral haemorrhage	1
Asiatics—	
Accidents	5
Myocarditis	1
Syphilis	1
African—	
Abscess, cerebral	1
Addison's disease	1
Cirrhosis of liver	1
Dysentery bacillary	3
Drowning	3
Embolus, cerebral	1
Food deficiency	1
Fractured skull	18
Gastro enteritis	5
Injuries and hæmorrhage	13
Intestinal obstruction	2
Malaria	2
Meningitis, meningococcal	6
Myocarditis	6
Mitral stenosis	3
Nephritis : Interstitial	3
„ Parenchymatous	3
Oedema of larynx	3
Peritonitis (ruptured dodenal ulcer)	1
Plague	7
Pneumonia	26
„ and meningitis	6
„ and pericarditis	1
„ and meningitis and pericarditis	1
Pneumonia, broncho	2
Poisoning, alcoholic	3
„ strychnine	1
Septicaemia	9
Shock post operative	3
Strangulation	4
Syphilis	5
Thrombosis cerebral	1
Tuberculosis	43
Tumours	5
Typhoid	3
Vagal inhibition	1
Total	210

3—Histological Examinations

European—			
Tumours :	Benign		28
	Malignant		13
Curettage—	Non-malignant		30
	Malignant		1
Inflammatory			57
Tuberculosis			1
Other tissue			4
	Total		134
Asiatic—			
Tumours :	Benign		4
	Malignant		2
Curettage :	Non-malignant		3
Inflammatory			5
Tuberculosis			2
	Total		16
African—			
Tumours :	Benign—		
	Adenoma	14	
	Chondroma	1	
	Cysts	4	
	Endometrioma	2	
	Fibroma	12	
	Haemangioma	10	
	Lipoma	2	
	Myeloma	2	
	Myxoma	1	
	Polypeio	7	
			55
	Malignant—		
	Carcinoma	27	
	Endothelioma	6	
	Epithelioma	40	
	Melanoma	10	
	Mixed tumour of parotid	1	
	Rodent ulcer	2	
	Sarcoma	36	
	Teratoma	4	
			126
	Total		181
Curettage : Non-malignant			16
	Total		16
	Other conditions		
Amoebiasis			3
Cirrhosis liver			3
Degeneration			2
Fungi			5
Hodgkin's disease			1
Inflammatory			95
Leprosy			4
Leukaemias			5
Malaria			3
Nephritis			6
Schistosomiasis			3
Syphilis			10
Tuberculosis			38
	Total		178
Tissues negative for a specified condition			67
Animal tissues			18
Postmortem tissues			31
			116

Total Examinations : 641

D—SECTION OF BACTERIOLOGY

1—Staff

This section was in the charge of Dr. R. M. Dowdeswell until he went on leave in August, and of Dr. G. L. Timms from then until the end of the year. Mr. T. G. R. Jones acted as Laboratory Assistant until the end of May, when Mr. J. St. A. M. d'Souza returned from leave and took over from him. Mr. W. A. Doust was responsible for the preparation of culture media and for the manufacture of most of the stock vaccines.

2—Routine Work

Three thousand five hundred and thirty-three specimens were received for examination. Of these, 1,173 were cultured. These specimens fell mainly into the following groups:—

(*a*) *Sputum for T.B.*—1,394 specimens received, of which 122 were positive.

(*b*) *Swabs and films from Conjunctivæ.*—Smears from cases of conjunctivitis numbered 111. B. Koch-Weekes were found in 59, gonococci in 9, gonococci and B. Koch-Weekes in 8, and B. Morax Axenfeldt in 2. Cultures, mainly from cases before operation at the Native Hospital, numbered 338, of which 31 contained pathogenic organisms.

(*c*) *Cerebro-spinal Fluid.*—One hundred and forty-five specimens were received. Seventy-two showed meningococci and a further 37 contained pus cells and though no organisms could be found, these were for the most part probably meningococcal also. Pneumococci were found in 13, *H. Influenzæ* in 5 and pneumococci and *H. influenzæ* together in 1. Streptococci were found in 1 and 17 showed no microscopical abnormality.

(*d*) *Smears for Gonococci.*—Urethral smears numbered 289, of these 102 were positive. Cervical and vaginal smears numbered 64 of which 13 were positive.

(*e*) *Throat Swabs.—C. diphtheriæ* was found in 23 throat swabs and Vincent's organisms in 3 out of a total of 299. Four swabs from the nasopharynx were cultured from meningococci; all were negative.

(*f*) *Urines.*—Three hundred and thirty-nine urines were examined of which 235 were cultured. In one case, *B. Friedlander* was, somewhat unexpectedly, found in pure culture.

(*g*) *Fæces.*—Of 110 specimens cultured for typhoid or dysentery, typical organisms were found in 5 only, namely *B. Sonne* (2), *B. Flexner* (2), *B. Morgan* (1).

(*h*) *Plague.—B. pestis* was found in 8 film from glands out of a total of 36. Thirty rats were examined of which 15 were positive.

(*i*) *Blood Cultures.*—Staphylococcus aureus was found in 1 case; 22 were sterile.

3—Vaccines

(*a*) *Autogenous Vaccines*

Ninety-eight were prepared.

(*b*) *Stock Vaccines*

	Prepared	Issued
	c.c.	*c.c.*
Detoxicated Gonococcal Vaccine	5,292	5,274
Anti-catarrhal Vaccine	720	780*
Multivalent Streptococcal and Straphylococcal Vaccine	528	540*
Mixed Staphylococcal	528	384
Mixed Streptococcal	204	132
Mixed B. coli	600	96
B. pertussis	39	39
Brucella Abortus	240	Nil

*Stocks prepared in 1936 and issued in 1937.

(c) *Stock Prophylactic Vaccines*

Plague Vaccine.—Prepared, 370,000 c.c.; issued, 198,450 c.c.

Pneumo Vaccine.—Prepared, 84,000 c.c.; issued, 59,138 c.c.

T.A.B. Vaccine.—(During 1937 this vaccine was treated with formalin (0.2 per cent) instead of with carbolic as previously.). Prepared, 44,000 c.c.; issued, 32,900 c.c.

Anti-rabic Vaccine.—Prepared, 63 courses; issued, 61 courses.

4—Anti-sera

The following anti-sera obtained from England or South Africa were issued:—

	Ampoules
Anti-streptococcal (multivalent) (25 c.c.)	173
Anti-streptococcal (multivalent) (8 c.c.)	44
Anti-meningococcal (10 c.c.)	632
Tetanus anti-toxin (prophylactic) (3,000 units)	241
Tetanus anti-toxin (therapeutic) (20,000 units)	265
Gas gangrene anti-toxin (25 c.c.)	116
Sclavo's anti-anthrax serum (10 c.c.)	163
Diphtheria anti-toxin (2,000 units)	30
Diphtheria anti-toxin (4,000 units)	35
Diphtheria anti-toxin (16,000 units)	98

5—Water Analyses

Nine samples from public supplies and one from a private supply were examined during the year.

6—Research

The isolation and typing of meningococci from cases of meningococcal meningities at the Native Hospital was continued during the first half of the year.

The survey of *S. typhi* "H" and "O" agglutinins in sera from Africans not suspected to be suffering from typhoid was completed. *The results have been published elsewhere.

E—SEROLOGICAL SECTION

1—Staff

Dr. G. L. Timms was in charge of the section throughout the year.

2—Routine Examinations

(a) *For Syphilis*

The Kahn reaction was used as in previous years. Early in the year the antigen was adjusted to standard sensitivity against standard antigen from America. The resulting suspension was slightly less sensitive than that in use previously and "doubtful" reactions are now, as far as can be judged from the clinical details available, confined almost entirely to cases under treatment.

* "Typhoid Agglutinins in the Native Population" by R. M. Dowdeswell, Trans. of the Roy. Soc. of Trop. Med., Vol. 31, No. 3, p. 363, November, 1937.

Four thousand and twenty-nine specimens were received and the following results obtained:—

Sera

Negative	2,026
Positive	1,585
Doubtful	326
Unfit for test	77

Cerebro-Spinal Fluids

Negative	6
Positive	3
Doubtful	4
Unfit for test	2

Wasserman tests were done occasionally on a few selected cases and confirmed the results of the Kahn test, but this test is not satisfactory as a routine at present owing to the very low complement titres obtained from the guinea pigs.

(*b*) *Pregnancy Tests*

Early in the year, at the request of a general practitioner, pregnancy tests were started. Although not a serological test, the results are included here for convenience. Friedman's technique, using virgin rabbits was used, and suitable animals are now segregated soon after birth and kept apart until required.

Thirteen urines were received, and of these seven were positive and six negative. Certain of the negative cases were confirmed by the after history; those giving a positive result could not be traced.

(*c*) *Agglutination Tests*

Seven hundred and sixty-four sera were received for examination for agglutinins against the typhoid group of organisms. All such sera were also put up against a suspension of *Brucella abortus* supplied by the Veterinary Research Laboratory, Kabete. The following results were obtained:—

	European	African	Asian
Negative	39	415	29
Giving a titre of 1:50 or over against—			
i. B. typhosus	22	149	14
ii. B. Para Typhosus A	1	3	1
iii. B. id. Typhosus B	1	10	0
Group agglutination (T.A.B.)	20	40	0
iv. Brucella Abortus	0	30	0

Twenty-six sera were also examined for the Weil Felix reaction, with the following results:—

	European	African	Asian
Negative	5	5	1
X2 (1 : 50 or over)	2	—	—
XK id	5	8	—
X 19 id	0	0	0

F—SECTION OF BIOCHEMISTRY

1—Staff

The Biochemist, Dr. D. H. Harvey, proceeded on overseas leave on 18th September, 1937.

Mr. H. M. Nefdt, Laboratory Assistant, returned from leave on the 21st April, 1937, Mr. A. H. Daws having been attached to the section until that date.

In addition there were two African Laboratory Assistants.

2—Routine Work

The number of routine examinations carried out during the year is given below:—

General examination, i.e. reaction, specific gravity, albumin, sugar and deposit ...	1,550
Maclean's urea concentration test ...	40
Sugar	24
Diastase	1
Deposit	6
Albumin	16
Lead	3
Diazo Reaction	1
(*b*) *Blood*—	
Sugar tolerance curves	23
Sugar	15
Urea	63
Van den Bergh	10
Uric acid	1
Chloride	1
(*c*) *Fæces*—	
Occult blood	38
Fat estimation, i.e. total fat, fatty acids, neutral fat and soaps	7
Bile	7
(*d*) *Gastric Contents*—	
Fractional tests for total and free acidity, bile, blood, starch and lactic acid ...	54
Vomit	1
(*e*) *Cerebro-spinal Fluid*—	
Excess globulin	8
Lange gold curves	15
(*f*) *Miscellaneous*—	
Renal calculus	1
Human milk	1
Total ...	1,886

134,000 doses of metallic bismuth were prepared and issued to Medical Stores.

Metallic bismuth preparations were also dispatched to a number of stock owners for injection against bacillary necrosis in calves. Very satisfactory results have been reported.

3—Research Work

Work was started on the basal metabolic rate and energy exchange during standing and walking. The subjects were Laboratory staff natives.

Sixty-one observations on B.M.R. were made with 53 on energy exchange during standing and 23 during walking.

The complete analysis of 15 samples of rice was made for Mr. and Mrs. Culwick, of the Tanganyika Administrative Service, in connexion with their work on sex-ratio in Ulanga.

An examination of the dietaries in use in the Government Native Hospitals was made and a large scale rat-feeding experiment was planned and is at present still in progress.

Clinical trials, extending over two years, of a water soluble bismuth preparation evolved by Mr. H. M. Nefdt, gave very favourable results and it is proposed to continue its trial both in Kenya and Uganda on a more extensive scale.

ADDENDUM

REPORT OF THE SECTION OF MEDICAL ENTOMOLOGY FOR THE YEAR 1937

1—Staff

The staff included Mr. C. B. Symes, Medical Entomologist in Charge, Dr. J. I. Roberts, Medical Entomologist, Mr. J. C. McMahon and Mr. W. E. Grainger, Senior Laboratory Assistants, Miss E. C. Macdonald, Laboratory Assistant, Mr. J. O. Harper, Mr. C. Teesdale, Mr. C. Greenway, Malaria Overseers, Mr. R. T. Vane, Tsetse Field Overseer, and 39 African Assistants.

In addition, 12 African Assistants were employed at Mombasa under the Colonial Development Fund Malaria Control Scheme.

2—Leave

Mr. J. O. Harper was seconded to Uganda in February for duty with the Rockefeller Foundation Yellow Fever Investigation.

Mr. C. B. Symes proceeded on leave in March and returned to Nairobi in December.

Dr. J. I. Roberts returned from leave in August and was posted for duty to the Medical Section.

Mr. C. Teesdale proceeded on leave in June.

3—Mosquitoes and Malaria

(*a*) *Nairobi*

(i) Routine observations continued until September when a Malaria Overseer and 6 Africans, employed by the Nairobi Municipal Council, finished their training with us and took over the work. We now keep a watch on adult activities only.

Microscopical examinations of the salivary glands of female mosquitoes captured in houses were carried out as follows:—

Number examined: *A. gambiæ*, 3,094; with sporozoites, 2.

(ii) Proposed new R.A.F. Aerodrome: A detailed survey of mosquito breeding grounds was carried out in July and a report submitted with recommendations for control.

(iii) At the request of the Medical Officer, Liebig's, Ltd., a mosquito survey was carried out at Athi River and a report, with suggestions for control, was submitted.

One African was trained by us for mosquito control duties with Messrs. Liebig's.

(*b*) *Kisumu.*—Mr. W. E. Grainger, acting as Malaria Overseer, with six African Assistants, has continued the measures of temporary control started in co-operation with the Medical Officer of Health in 1931. A serious increased production of *A. funestus* occurred after the heavy rains in the large swampy area beyond the southern boundary of the township. Additional staff were employed for oiling and paris-green applications, with good effect.

The work under the Colonial Development Fund Malaria Control Scheme has continued under the charge of the Sanitary Inspector (Mr. Hewitt) with whom Mr. Grainger works in the closest co-operation.

Microscopical examination of the salivary glands of captured adult females were carried out as follows:—

A. gambiæ examined, 4,027; *A. gambiæ* with sporozoiites, 144. *A. funestus* examined, 7,890; *A. funestus* with sporozoites, 303.

(*c*) *Kakamega.*—Mr. Greenway has continued his township control and advisory visits to the mining areas. He records breeding of *A. ægypti* in one mine in rock pools at 240 feet below ground level and adults of certain species of culicines at 650 feet below the surface. It is hoped to produce a short report on these findings in the near future.

(*d*) *Fort Hall, Digo, Meru, Isiolo, Malindi, Kilifi, Kisii and Keruguya.*—

Trained Africans have continued investigations and general control work in these districts. Little progress has been made with the covering of wells in Kilifi and Malindi.

(*e*) *Mombasa.*—The entomological survey started in 1936 continued intensively until June when Mr. Teesdale who was in local charge proceeded on leave. Certain routine investigations have however been continued by Africans under the supervision of the Medical Officer of Health.

The survey was made as exhaustive as possible and though primarily for malaria control it dealt with all mosquitoes.

A report has been submitted to the Medical Officer of Health in order that the engineering survey (for control works) may proceed.

A complete report on this investigation will be prepared as soon as possible.

(*f*) Mosquito surveys were carried out at Lodwar and Lokitaung (Turkana) at the request of the Medical Officer.

A report with suggestions for control was submitted.

4—Yellow Fever

A small *ædes* survey of a rural area in Central Kavirondo was carried out in January. *A. ægypti* breeding index in 259 huts and compounds was 0.4. No adults were found.

A. vittatus was found breeding in occasional rock pools and *Tæniorhynchus uniformis* and *T. africanus* adults were numerous.

No other special work was done in this connexion. Constant searching for *A. ægypti* in connexion with control measures has been carried out however in Kisumu, Mombasa, Kakamega, Malindi and Kilifi. Kisumu township has now been almost completely free from *A. ægypti* for several years. It is hoped to extend *Aedes ægypti* control to all areas in which our staff operates during the coming year.

5—Insects in Aeroplanes

Searches in aeroplanes have been discontinued in Nairobi, and for many months in Kisumu. Sufficient data have been collected to indicate the necessity for routine measures of disinfestation. These are applied in Kisumu and Mombasa to all machines arriving from outside the Colony. The pyrethrum-paraffin-carbon-tetrachloride mixture mentioned in the 1936 Report is still in satisfactory use, though the dosage used and the length of exposure allowed are insufficient to deal with insects such as Tabanids and house flies.

6—Tsetse Fly (*G. palpalis*)

(*a*) *Kaniadoto.*—Elimination by the "block" method has continued under the charge of Mr. R. T. Vane in the Kabwach forest area of the Kuja River. Density has been reduced here to an almost negligible figure but the area is so large that complete elimination of residual flies may take a considerable time.

(*b*) *Port Victoria.*—Work was continued until October under Mr. Southby's supervision. Since then a skeleton African staff has maintained control. The funds from the Colonial Development Fund were exhausted in March. Since then the Local Native Council has borne the financial burden.

Results are not so good as we had hoped—owing to the initial very high densities and to invasion from a nearby island which has had to be dealt with.

A complete report on this, the second experiment against *palpalis*, supported by the grant from the Colonial Development Fund, will be furnished as soon as possible.

7—General

(*a*) Tests were made with "Buconin" and "Moskil", two insecticides intended for use against mosquitoes. The former was too expensive for general use—though very effective. The latter was ineffective when compared with "homemade" pyrethrum-paraffin fluid.

Cresol and chloride of lime were tested as mosquito larvicides on the suggestion of medical officers. Neither proved to be practicable.

(*b*) *Fly Breeding.*—Brief investigations were carried out on the production of flies in compost pits (Indore system). Very large numbers of *Musca* spp. (?cuthbertsoni) were obtained from pits under observation.

A similar investigation in connexion with fly breeding in pit latrines shows that very large numbers of *Chrysomia* are produced in pit latrines in general use.

8.—Plague

Other than a small rat flea survey in the Keruguya-Embu district, no work has been done in connexion with plague.

9.—Typhus and Schistosomiasis

Work on typhus and schistosomiasis has been discontinued for the time being.

10.—Acknowledgments

I have pleasure in acknowledging help in various ways given by Dr. Edwards of the British Museum, Mr. C. F. M. Swynnerton and the members of the Tsetse Research Staff, Tanganyika, Sir G. Marshall and staff of the Imperial Institute of Entomology and, particularly, to Dr. Evans of the Liverpool School of Tropical Medicine, whose death has deprived us of a colleague whose enthusiastic help, untiring energy and cheerfulness, we shall never forget.

I wish also to record here the valuable work done by our African Assistants. They are fast becoming technical workers of no mean order—reliable, industrious and interested in their work. Their demands for increased knowledge and experience are becoming more and more difficult to meet.

11—Publications

"*Anopheles funestus* and its allies in Kenya", by A. M. Evans and C. B. Symes.

Ann. Trop. Med. & Par. Vol. 31, No. 1, April, 1937.

APPENDIX

RESUME OF WORK CARRIED OUT AT THE CLINICAL LABORATORY ATTACHED TO THE NATIVE HOSPITAL, MOMBASA, DURING 1937

1—Staff

European.—Mr. W. L. Titman was in charge throughout the year.

Native.—Three trained African Assistants.

2—Examinations

During the year 18,941 specimens were received and dealt with, an increase of 4,488 over the previous year. This is the highest number of specimens received in any one year since the opening of the Laboratory. The increase has resulted in an additional African Assistant being permanently posted to Mombasa.

The sum of Sh. 3,197.50 was collected on account of private examinations.

A detailed account of the work carried out is given below:—

(*a*) *Blood Examinations*

(i) Microscopical examinations (parasites, counts, etc.): 6,951 blood slides were examined, an increase of 1,505 over the year 1936, as follows:—

Negative	4,916
Differential counts	563
Complete blood counts	72
P. falciparum (crescents 32)	1,300
P. malariæ	47
P. vivax	15
S. rossi	4
Microfilariæ—sheathed	2
Microfilariæ—unsheathed	32
(Mixed infections (17) included in the above)	

(ii) Other blood examinations; 38:

Sugar tolerance curves	9
Sugar tests (single estimations)	8
Blood grouping tests	12
Coagulation time	4
Hæmoglobin estimation	1
Blood cultures	4

(*b*) *Fæces Examination*

Four thousand, six hundred and three specimens were received and examined, an increase of 718 over the previous year. *Ancylostoma* were the predominating ova. *E. hystolytica* appears practically the same.

The following list shows the number of occasions on which individual helminths and protozoa were identified:—

Negative	1,962
Tænia saginata	474
Ascaris lumbricoides	787
Ancylostoma duodenale	1,213
Trichuris trichura	929
Schistosoma mansoni	111
Strongyloides stercoralis	145
Oxyuris vermicularis	108
Entamœba coli	822
Entamœba histolytica	298
Giardia intestinalis	264
Iodamœba butschlii	24
Flagellates (undifferentiated)	232

Other fæces examinations, 71:—

Occult blood	62
? T.B. (negative)	2
Culture	7

(c) Serological Examinations

(i) Widal's test was carried out on 150 semples of sera taking as a standard agglutination in a dilution of 1 in 50 or higher, with the following results:—

Negative	106
B. typhosus alone	31
B. para A alone	—
B. para B alone	1
Group agglutinations	12

In addition to the above, 5 specimens were put up against Melitensis and Abortus, 1 of which was positive.

(ii) Six hundred and fifty-one specimens for the Kahn reaction were received, pipetted off and forwarded to Nairobi.

The number of sera received has increased over the previous year by 251 and is four times as many as those received in 1935.

(d) Bacteriological Examinations

(i) *Gonorrhœa.*—660 specimens of urethral exudate were received and *Diplococcus gonorrhœa* was identified microscopically in 297.

Nine smears from eyes were examined and gonococci were identified in three.

(ii) *Lymph from Chancres.*—Forty-nine specimens were received and examined. *T. pallida* was demonstrated in seven specimens.

(iii) *Sputum.*—600 specimens were received and examined for Tubercle bacilli with the following results:—

Negative	451
Positive	149

In addition to the above, three specimens were tested by the antiformin method, all of which proved negative.

(iv) *Leprosy.*—Fifty-one nasal smears and scrapings were examined as follows:—

Negative	41
Positive	10

(v) *Plague.*—1,435 smears from rats, either found dead or trapped, were examined for *B. pestis.* All proved negative.

(vi) *Cerebro-spinal Fluid.*—Twenty-five specimens were received and examined as follows:—

Negative	17
Meningococci present	4
Pneumococci	3
Cell counts	1

(vii) *Anthrax.*—Three smears were received, one of which showed *B. anthracis.*

(viii) *Cultures.*—156 specimens were received for culture, as follows:—

Urine	112
Sputum	3
Miscellaneous	18

Throat Swabs—K.L.B.

Negative	20
Positive	3

(e) Urines

4,051 specimens were received, a great increase over the previous year:—

General examination—	
(Reaction, sugar and albumin) ...	2,180
(General and deposit)	1,180
Gonococci—	
Negative	12
Positive	5
Sugar estimation	11
For T.B.—Negative	3
Albumin estimation	16
Urea concentration test	14

(f) Gastric Analysis

Nine fractional test meals were performed for total and free acidity, etc.

(g) Water Analysis

Ten bacteriological examinations of water were carried out, 4 from the Mombasa water supply and six from various wells.

The preliminary results of these, together with sub-cultures, were forwarded to Nairobi for completion of the tests.

(h) Pathological Specimens

Sixteen specimens for histological examination were forwarded to Nairobi.

(i) Miscellaneous Specimens to Nairobi

10 specimens for vaccine preparation,

10 specimens of "tembo" distillate for alcoholic percentage,

2 blood filtrates.

(j) Post-mortems

Twenty-four post-mortems were carried out as follows:—

Drowning	6
Typhoid	1
Carcinoma of liver	1
Fractured skull	1
Pneumonia	1
Bronchiectasis	1
Peritonitis	1
T.B.	1
Lunatic	1
Suicide	1
Malaria	1
Heart failure	2
Diseased gall bladder	1
Murder	5